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# SHARP 14SL30 SERVICE MANUAL

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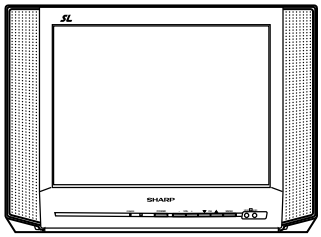
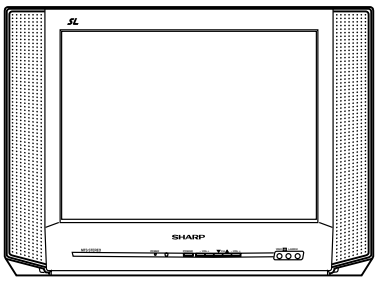
# SHARP SERVICE MANUAL

S89N421SL40//



14SL30



21SL40, 21SL70

## COLOR TELEVISION

***Chassis No. SN-90A(14")***
***Chassis No. SN-80A(21")***

# MODELS 14SL30 21SL40, 21SL70

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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## ELECTRICAL SPECIFICATIONS

POWER INPUT ..... 110 - 220 V AC 50/60 Hz
POWER RATING
  14SL30 ..... 65 W
  21SL40 ..... 91 W
  21SL70 ..... 96 W
PICTURE SIZE
  14SL30 ..... 580cm$^2$ (89,9sq inch)
  21SL40, 21SL70 ..... 1,240cm$^2$ (192sq inch)
CONVERGENCE ..... Magnetic
SWEEP DEFLECTION ..... Magnetic
FOCUS ..... Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES
  Picture IF Carrier Frequency ..... 45.75 MHz
  Sound IF Carrier Frequency ..... 41.25 MHz
  Color Sub-Carrier Frequency ..... 42.17 MHz (Nominal)
AUDIO POWER OUTPUT RATING
  14SL30 ..... 1.3W + 1.3W (at 10% distortion)
  21SL40 ..... 2.0W + 2.0W (at 10% distortion)
  21SL70 ..... 4.0W + 4.0W (at 10% distortion)
SPEAKER
  SIZE
    14SL30 ..... 9 x 5 cm
    21SL40, 21SL70 ..... 12 x 6 cm
  VOICE COIL IMPEDANCE
    14SL30 ..... 8 ohm at 400 Hz
    21SL40, 21SL70 ..... 6 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE
  VHF/UHF ..... 75 ohm Unbalanced
TUNING RANGES
  VHF-Channels ..... 2 thru 13
  UHF-Channels ..... 14 thru 69
  CATV Channels ..... 1 thru 125

***Specifications are subject to change without prior notice.***

# IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

## WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
   To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.

## SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

**When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)**

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

## X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
   It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
   The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
   Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

# IMPORTANT SERVICE SAFETY PRECAUTION

**(Continued)**

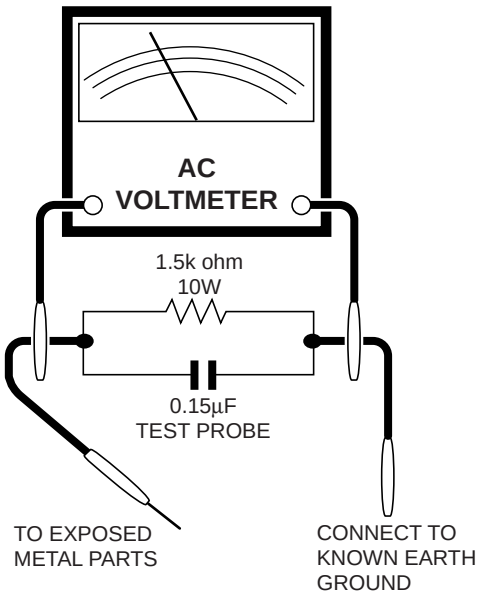
## BEFORE RETURNING THE RECEIVER

## (Fire & Shock Hazard)

**Before returning the receiver to the user, perform the following safety checks.**

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 110~220 volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  AII checks must be repeated with the AC ine cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)
  Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



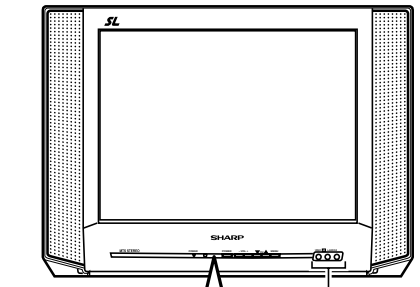

## SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

# LOCATION OF USER'S CONTROL

## Front Panel




**VIDEO/AUDIO IN TERMINALS**
(VIDEO/AUDIO terminals are also provided on the rear.)

SENSOR AREA FOR REMOTE CONTROL

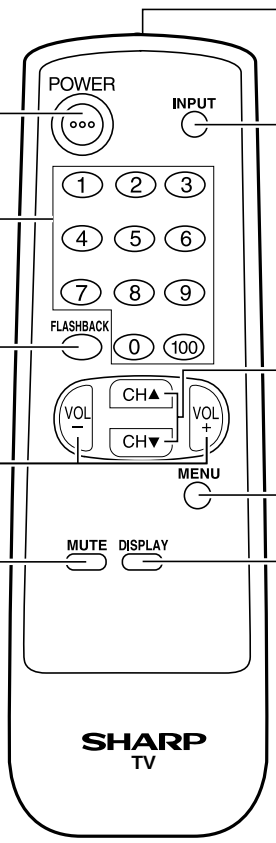
**MENU**
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

**POWER**
Press → On.
Press again → Off.

**VOLUME UP/DOWN**
(+) Increases sound.
(–) Decreases sound.

**CHANNEL UP/DOWN**
(▲) Selects next higher channel.
(▼) Selects next lower channel.

## Basic Remote Control Functions




Infrared Transmitter Window

**POWER**
Press → On.
Press again → Off.

**INPUT**
Press → Switch to external video INPUT 1 mode.
Press again → Switch to external video INPUT 2 mode.
Press 3 times → Switch back to the original TV mode.

**REMOTE KEYPAD**
Accesses any channel from keypad.

**FLASHBACK**
Returns to previous channel.

**VOLUME UP/DOWN**
(+) Increases sound.
(–) Decreases sound.
• In menu mode, changes or selects the TV adjustments.

**CHANNEL UP/DOWN**
(▲) Selects next higher channel.
(▼) Selects next lower channel.
• Moves the " ⬍ " mark of the MENU screen.

**MUTE**
Press → Mutes sound.
Press again → Restores sound.
• CLOSED CAPTION appears when sound is muted.

**MENU**
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

**DISPLAY**
Press → Displays receiving channel for 4 seconds.
Press again → Removes display.
• Temporarily displays receiving channel when in Closed Caption mode.

# INSTALLATION AND SERVICE INSTRUCTIONS

**Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.**
**(2) Before performing adjustments, the TV set must be on at least 15 minutes.**

## CIRCUIT PROTECTION

**The receiver is protected by a 3.15A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.**

## X-RADIATION PROTECTOR CIRCUIT TEST

**After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:**

1. Apply 110-220V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 and make sure that the voltmeter reads 20.6 ±1.5V.
5. Apply external 26.8V DC at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and make a short circuit between TP651 and TP652. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

## HIGH VOLTAGE CHECK

**High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:**

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 110~220V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "S19" and Bus data "01" (Y-mute on).
4. The voltage should be approximately, 24.0kV (14SL30) / 27.0kV (21SL40/70) (at zero beam).
   If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

**For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.**

**Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.**

## 1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

## 2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "S01" to "M05". Select the item you wish to adjust.

## 3. Data number selection

Press the Vol-up or down button to adjust the data number.

## To enter the service mode and exit service mode.

While pressing the Vol-up and Ch-up buttons at the sametime, plug the AC cord into a wall socket.
Now the TV set is switched on and enters the service mode.
To exit the service mode, turn the television off by pressing the power button.

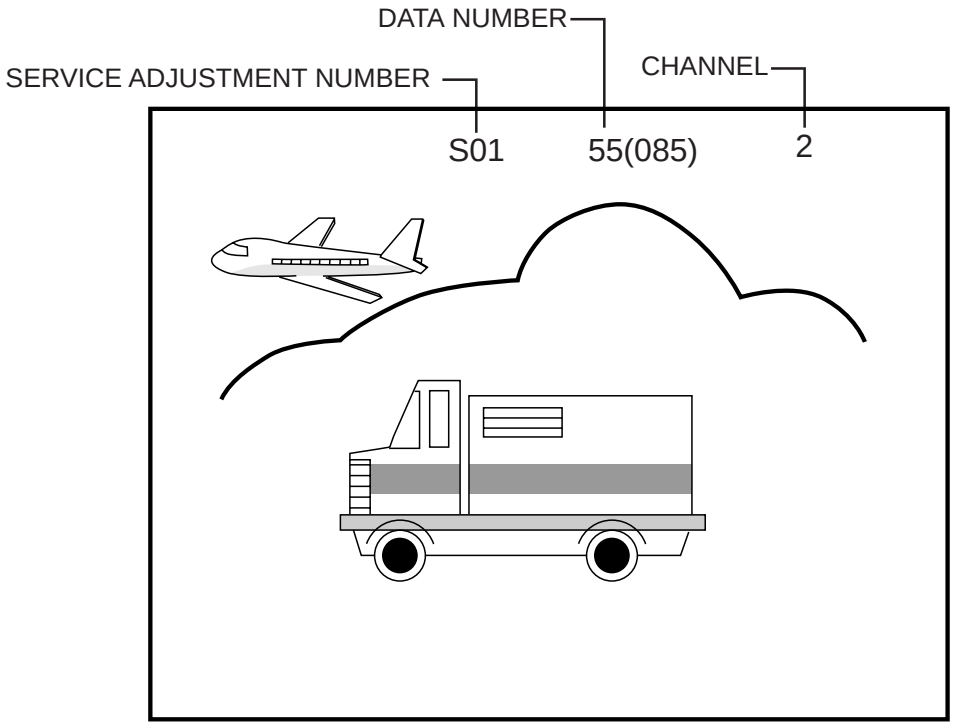



**Figure A.**

| SERVICE NUMBER | ADJUSTMENT ITEM | DATA | | ADJUSTMENT CONTENTS |
|---|---|---|---|---|
| | | INITIAL VALUE | RANGE | |
| S01 | PICTURE | 55 | 00-7F | |
| S02 | TINT | 46 | 00-7F | |
| S03 | COLOR | 32 | 00-7F | |
| S04 | BRIGHTNESS | 40 | 00-7F | |
| S05 | SHARPNESS | 28 | 00-3F | Must be set to "24" |
| S06 | VERTICAL PHASE | 00 | 00-07 | Must be set to "00" ~ "03" |
| S07 | HORIZONTAL PHASE | 12 | 00-1F | |
| S08 | RF-AGC | 23 | 00-3F | |
| S09 | VERTICAL AMP | 20 | 00-3F | |
| S10 | VCO | 2C | 00-7F | |
| S11 | R CUT-OFF | 00 | 00-FF | |
| S12 | G CUT -OFF | 00 | 00-FF | |
| S13 | B CUT-OFF | 00 | 00-FF | |
| S14 | G GAIN | 7F | 00-FF | |
| S15 | B GAIN | 7F | 00-FF | |
| S16 | TRAP(3.58MHz) | 00 | 00 or 01 | Must be set to "00" |
| S17 | BALANCE | 20 | 00-3F | Must be set to "20" |
| S18 | C.C.POSITION | 17 | 00-7F | |
| S19 | Y-MUTE | 00 | 00,01,03 | "00" = Normal, "01" = No-Y, "03" = No Vertical |
| S20 | ENERGY SAVE OFFSET | 20 | 00-3F | Must be set to "19" |
| S21 | D.D.E. OFFSET | 03 | 00-1F | Must be set to "03" |
| S22 | OSD SETUP | 00 | 00-03 | Must be set to "02" |
| S23 | TUNER SETUP | 00 | 00-01 | Must be set to "00" |
| OP | OPTION | 30 | 00-FF | Must be set to "02" (14SL30, 21SL40) / "16" (21SL70) |
| M01 | MTS LEVEL | 0A | 00-F | |
| M02 | STERO-VCO | 20 | 00-3F | |
| M03 | FILTER | 1C | 00-3F | |
| M04 | LOW SEPARATION | 20 | 00-3F | 21SL70 only |
| M05 | HIGH SEPARATION | 1B | 00-3F | |

**Table - A**

Holding down both the CH-up/down buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2101.

| PART REPLACED | ADJUSTMENT | | NOTES |
|---|---|---|---|
| | NECESSARY | UNNECESSARY | |
| IC2001 | | X | Data is stored in IC2101. |
| IC201 | X | | The adjustment is needed to compensate for characteristics of parts including IC201. |
| IC2101 | X | | Holding down both the CH-up/down buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2101. |
| CRT | X | | Adjust items related to picture tube only. |

**Table - B**

# ■ SERVICE ADJUSTMENT

## VCO Adjustment

1. Connect a digital voltmeter between pin (44) of IC201 and ground.
2. Receive a good local channel.
3. Enter the service mode and select the service adjustment "S10".
4. Adjust the data so that digital voltmeter reads 2.2V.
5. Adjustment is completed, remove the voltmeter, return to "normal" mode.

## RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S08".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.
   **Note 1 :** You will have to come out of the service mode to select another channel.
   **Note 2 :** Setting the data to "00" will produce a black raster.

## Screen Adjustment

1. Connect a digital voltmeter between TP852 and TP853 on the CRT Unit.
   **Note:** These test points may not be provided. Then connect the voltmeter to both ends of R852 located near Q852 on the foil side.
2. Receive a good local channel.
3. Enter the service mode and select the service adjustment "S03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "S03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
4. Select the service adjustment "S19" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
5. Select the service adjustment "S04" and adjust data value to obtain 0.17 volts on the digital voltmeter.
6. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
7. Adjust the service adjustments "S11" red, "S12" green and "S13" blue to obtain a good grey scale with normal whites at low brightness level.
8. Select the service adjustment "S19" and reset data to "00". Select the service adjustment "S03" and reset data to obtain normal color level.
9. Remove digital voltmeter, and reset the master screen control to obtain normal brightness range.

## White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S03" and set to "00" (minimum color)(Record original data code under adjustment "S03" before changing). "S03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "S14" and "S15" until a good grey scale with normal whites is obtained.
4. Select the service adjustment "S03" and adjust data to obtain normal color level.

## Sub-Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service adjustment "S01".
4. Adjust the data value to achieve normal contrast range.

## Sub-Tint Adjustment

1. Receive a good local channel.
2. Set customer tint control to center of it's range.
3. Enter the service mode and select the service adjustment "S02".
4. Adjust "S02" data value to obtain normal flesh tones.

## Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select the service adjustment "S03".
4. Adjust "S03" data value to obtain normal color level.

## Sub-Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service adjustment "S04".
4. Adjust "S04" data value to obtain normal brightness level.

## Vertical-Size Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S09".
3. While observing the top and bottom of the screen, adjust "S09" data value to proper vertical size.

## Vertical Phase Adjustment

1. Enter the service mode and select the service adjustment "S06".
2. Adjust data value to "00" ~ "03".
   **Note:** This must be set "00" ~ "03" when changed data retrace line will appear.

## Horizontal Position Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S07".
3. Adjust "S07" data value so that picture is centered.

## Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S18".
3. A black text box appears on the screen. (see **Figure B** below)
4. Adjust "S18" data value so that text box is positioned in the center of the screen.

## 3.58MHz Trap Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "S16".
3. This is a two position adjustment, "00" is ON, "01" is OFF.
4. Adjust data value to "00" for normal viewing.

## Sharpness, Audio Balance, Energy Save Offset, DDE Offset, OSD Setup, Tuner Setup and Option Adjustments

1. Receive a good local channel.
2. Enter the service mode and select the service adjustments "S05" for sharpness, "S17" for balance, "S20" for energy save offset, "S21" for DDE offset, "S22" for OSD setup, "S23" for tuner and "OP" for option.

- **Sharpness Adjustment**

3. Adjust data value to "24" (center of data range) for sharpness adjustment.

- **Audio Balance Adjustment**

4. Adjust data value to "20" (center of data range) for Audio balance adjustment.

- **Energy Save Offset Adjustment**

5. Adjust data value to "19".

- **DDE Offset Adjustment**

6. Adjust data value to "03".

- **OSD Setup Adjustment**

7. Adjust data value to "02".

- **Tuner Setup Adjustment**

8. Adjust data value to "00".

- **Option Adjustment**

9. Adjust data value to "02" (14SL30, 21SL40)/"16" (21SL70).

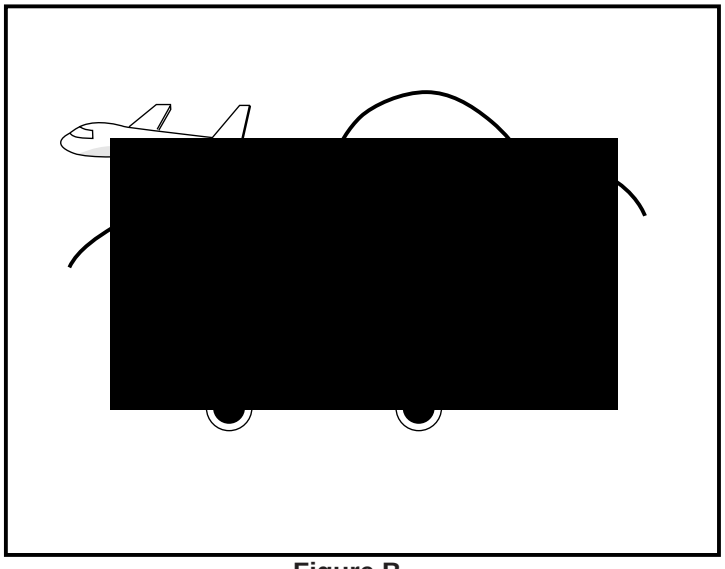


**Figure B.**

# ■ MTS ADJUSTMENT (Only for21SL70)

## MTS Level Adjustment

1. Feed the following monaural signal to pin (14) of IC3001.
   Monaural signal : 300Hz, 245mVrms
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service adjustment "M01".
4. Adjust the data so that the rms voltmeter reads. 490 ±10mVrms.

## MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100µF, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02"
5. Adjust the data so that the frequency counter reads. 62.94 ±0.75kHz.

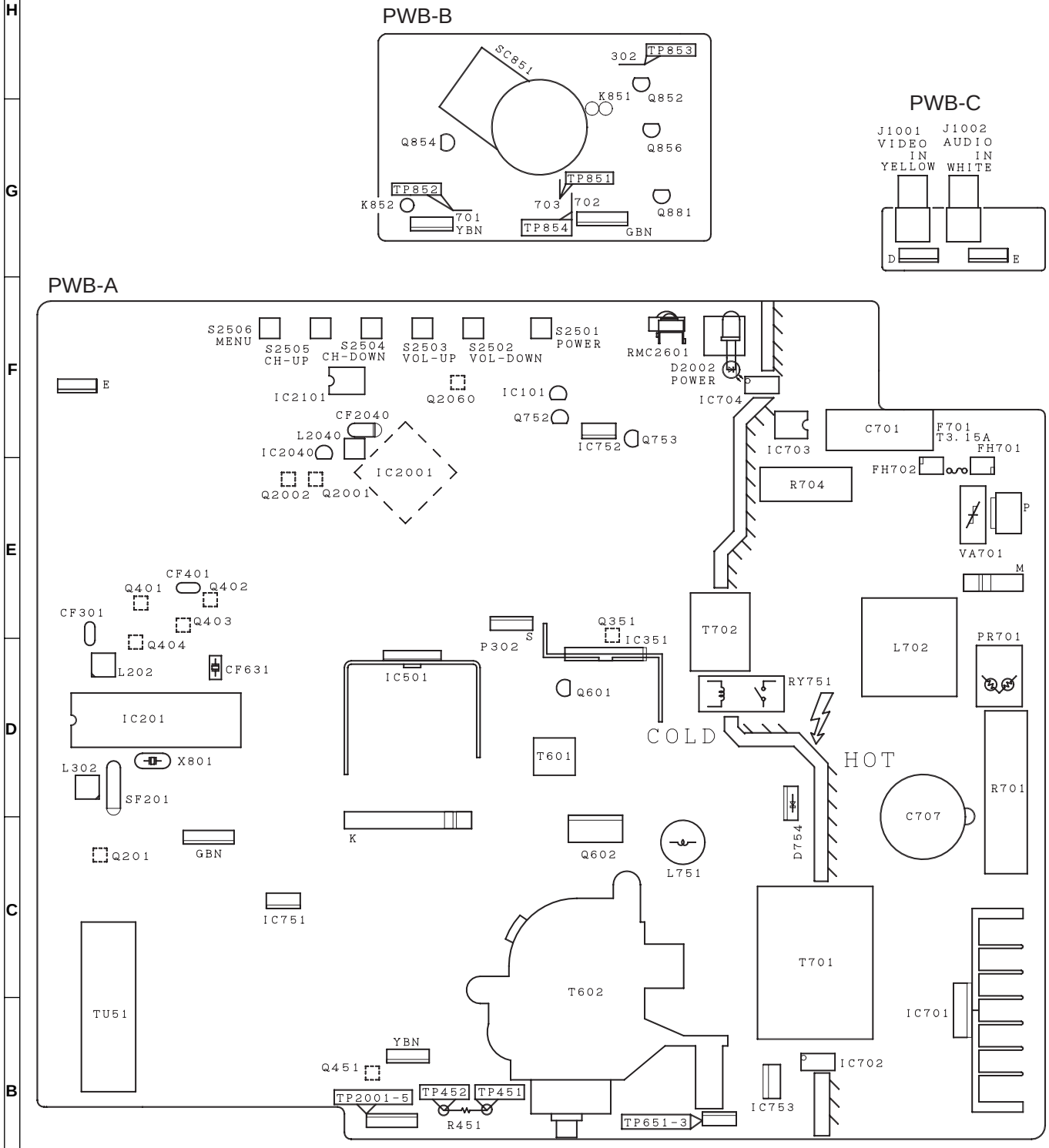
## Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 .
   Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data at the point where "OK" appears on the screen. The "OK" represents the approximate center of the adjustable range of the data.

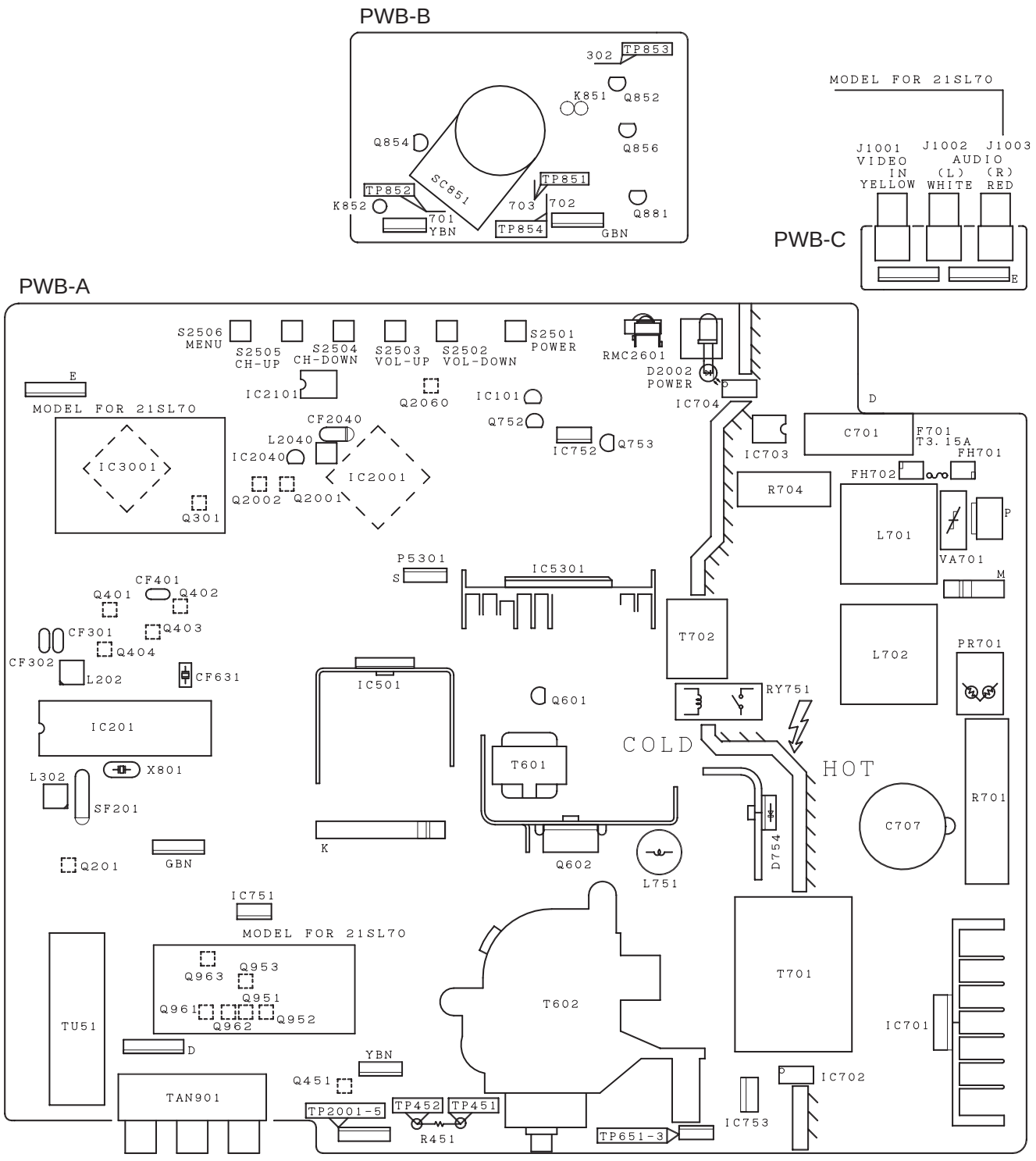
## Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.
   Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service adjustment "M04".
4. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
5. Receive the following composite stereo signal 2.
   Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service adjustment "M05".
7. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

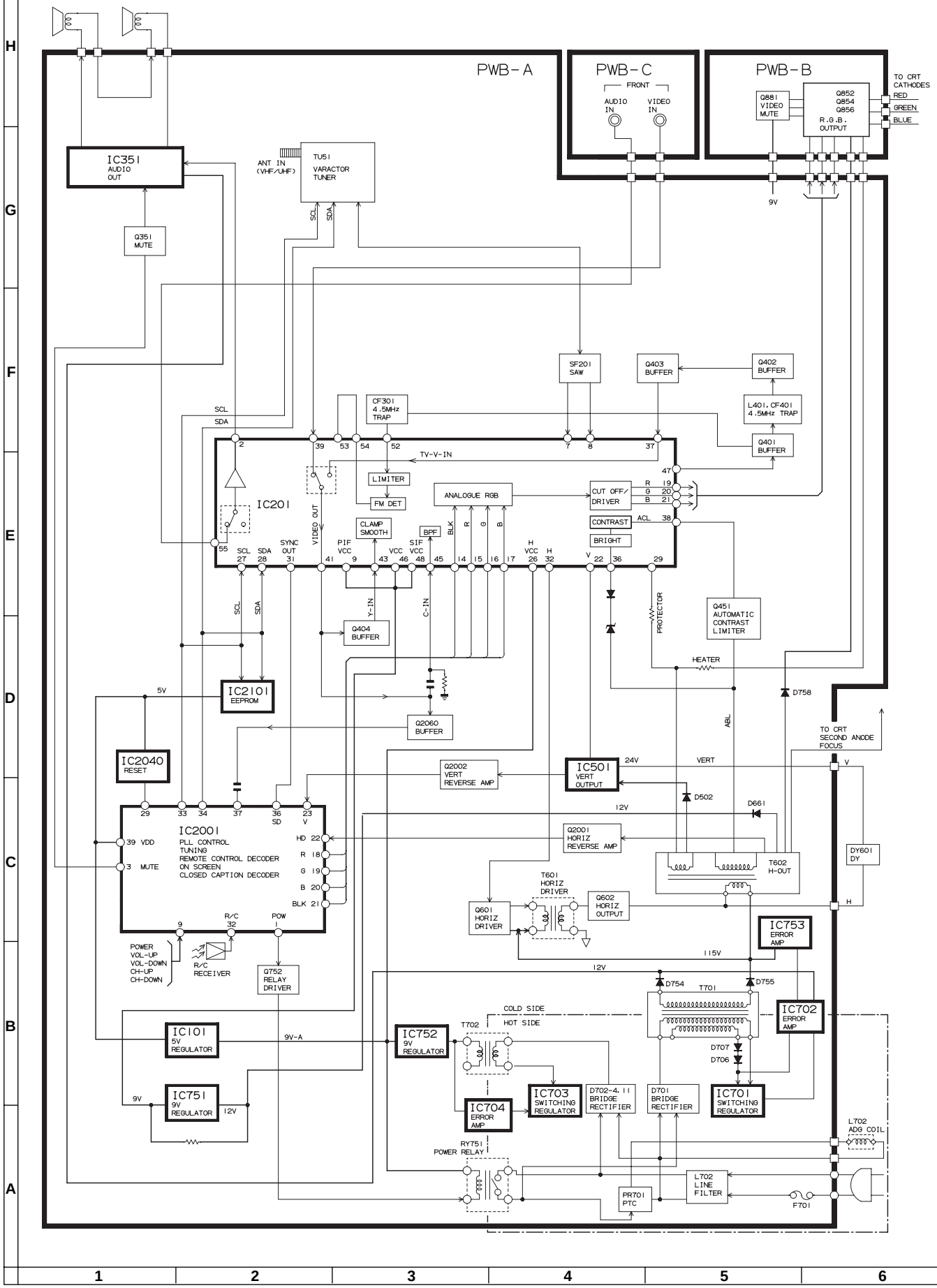
# MODEL 14SL30 CHASSIS LAYOUT



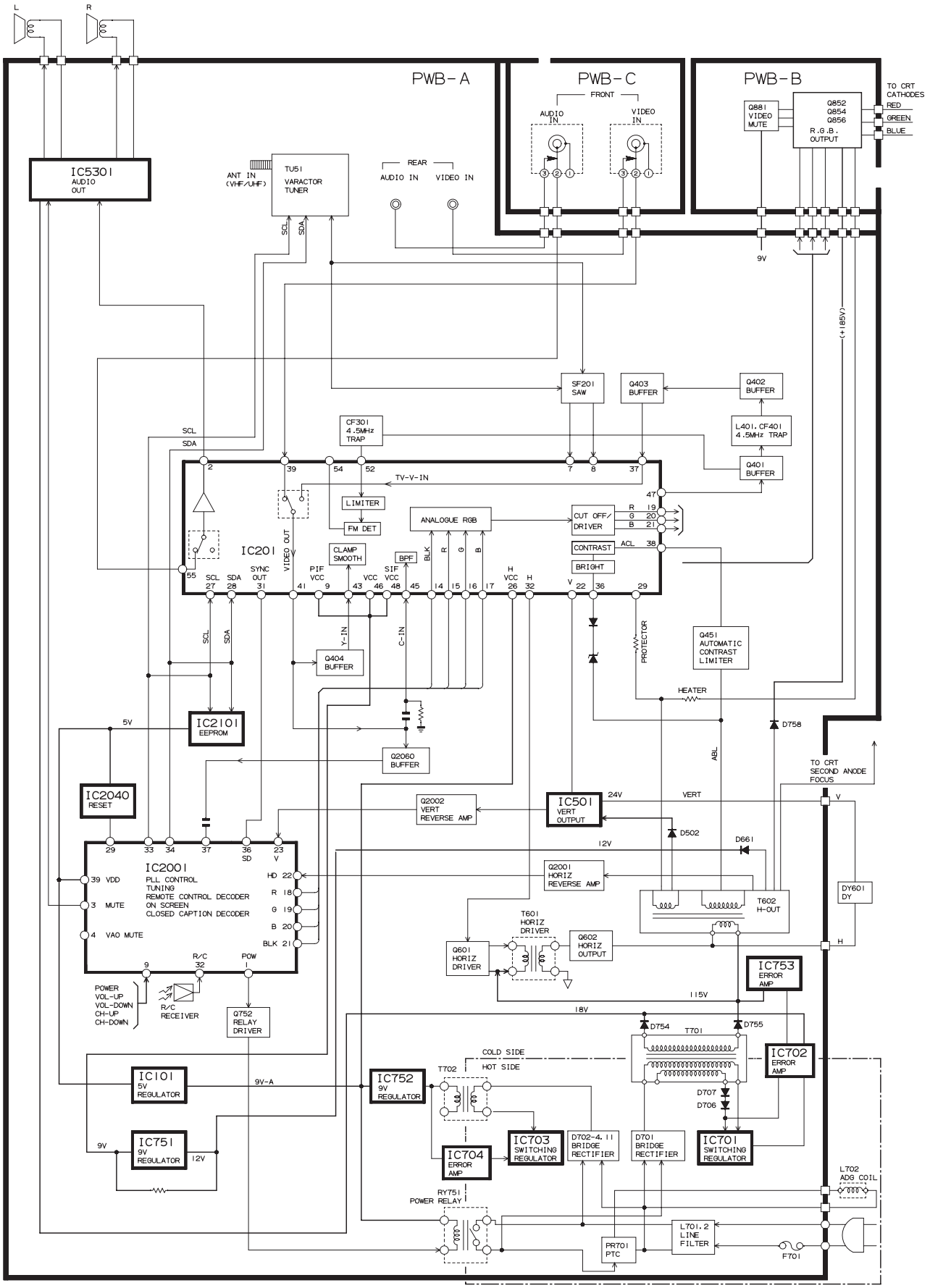
# MODELS 21SL40, 21SL70 CHASSIS LAYOUT



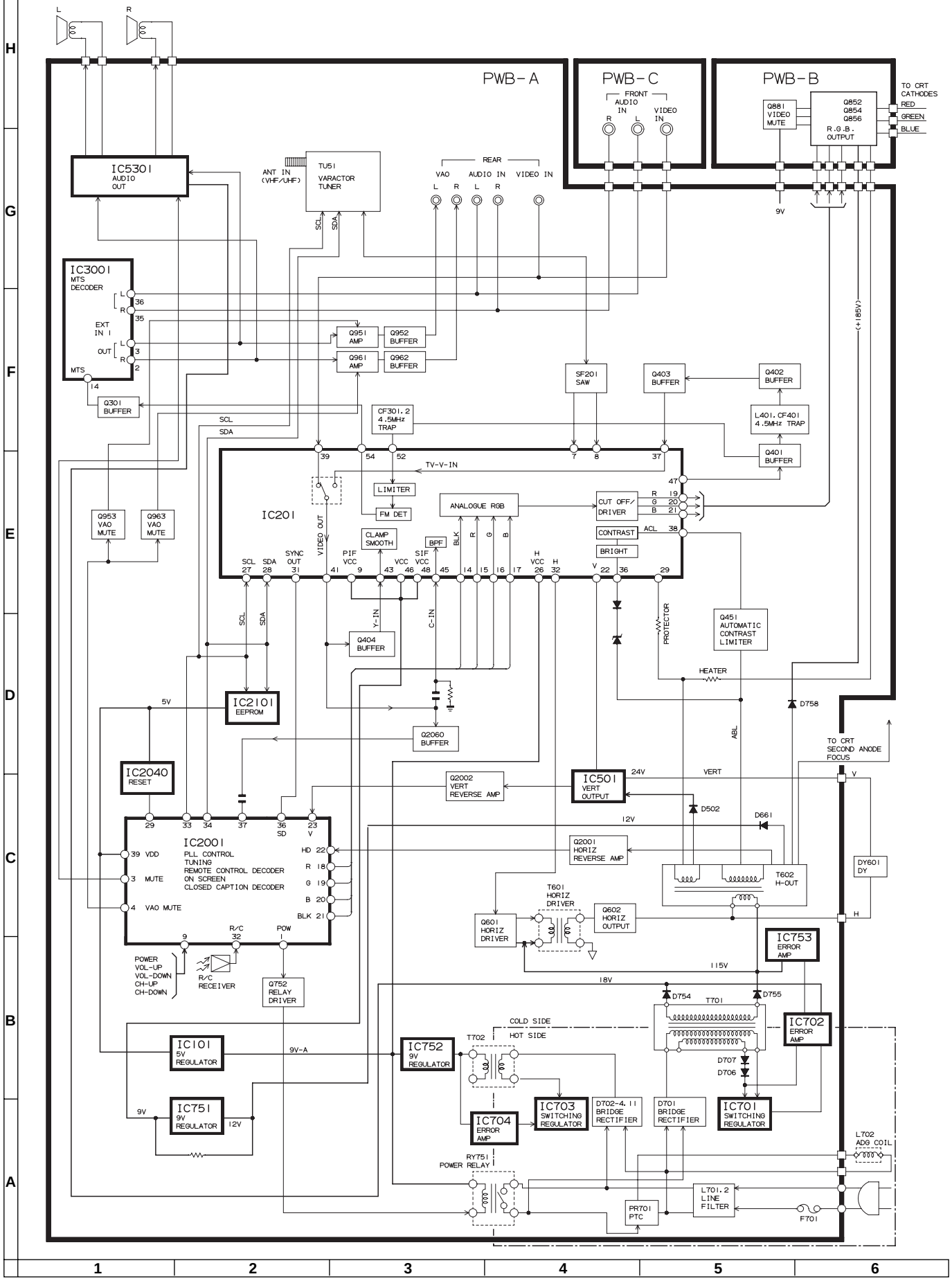
# MODEL 14SL30 BLOCK DIAGRAM



# MODEL 21SL40 BLOCK DIAGRAM



# MODEL 21SL70 BLOCK DIAGRAM



# DESCRIPTION OF SCHEMATIC DIAGRAM

***NOTES:***

1. *The unit of resistance "ohm" is omitted. (K=kΩ=1000Ω, M=MΩ)*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μ F, unless otherwise noted. (P=pF=μμF)*
4. *(G) indicates ±2% tolerance may be used.*
5. ⏚ *indicates line isolated ground.*
6. ⏚ *indicates hot ground.*

***VOLTAGE MEASUREMENT CONDITIONS:***

1. *All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 110~220V AC and all controls set for normal picture unless otherwise indicated.*
2. *All voltages measured with 1000μ V B & W or Color signal.*

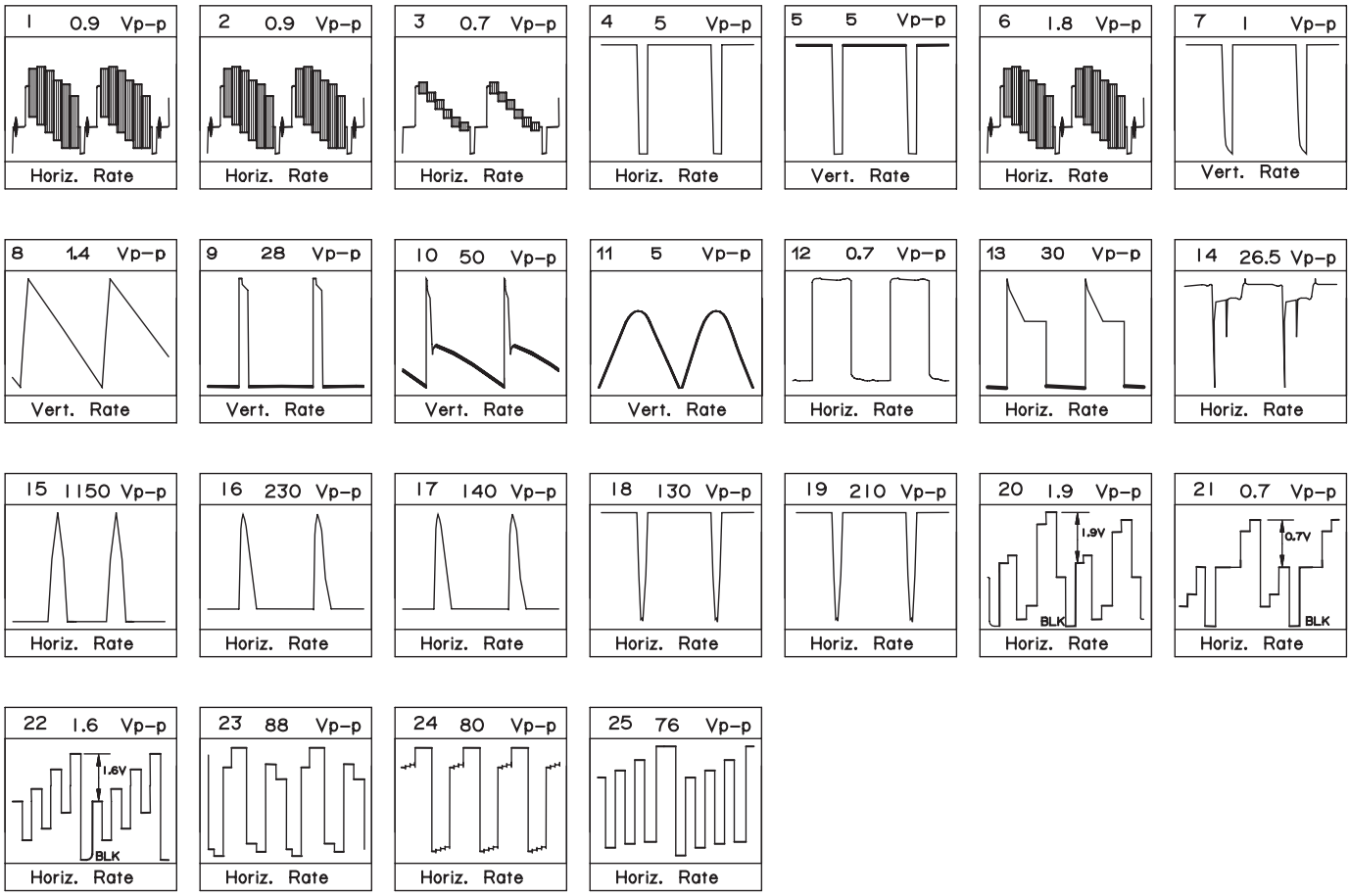
***WAVEFORM MEASUREMENT CONDITIONS:***

1. *Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.*
2. *indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)*

⚠ *AND SHADED ( ) COMPONENTS = SAFETY RELATED PARTS.*
▲ *MARK= X-RAY RELATED PARTS.*

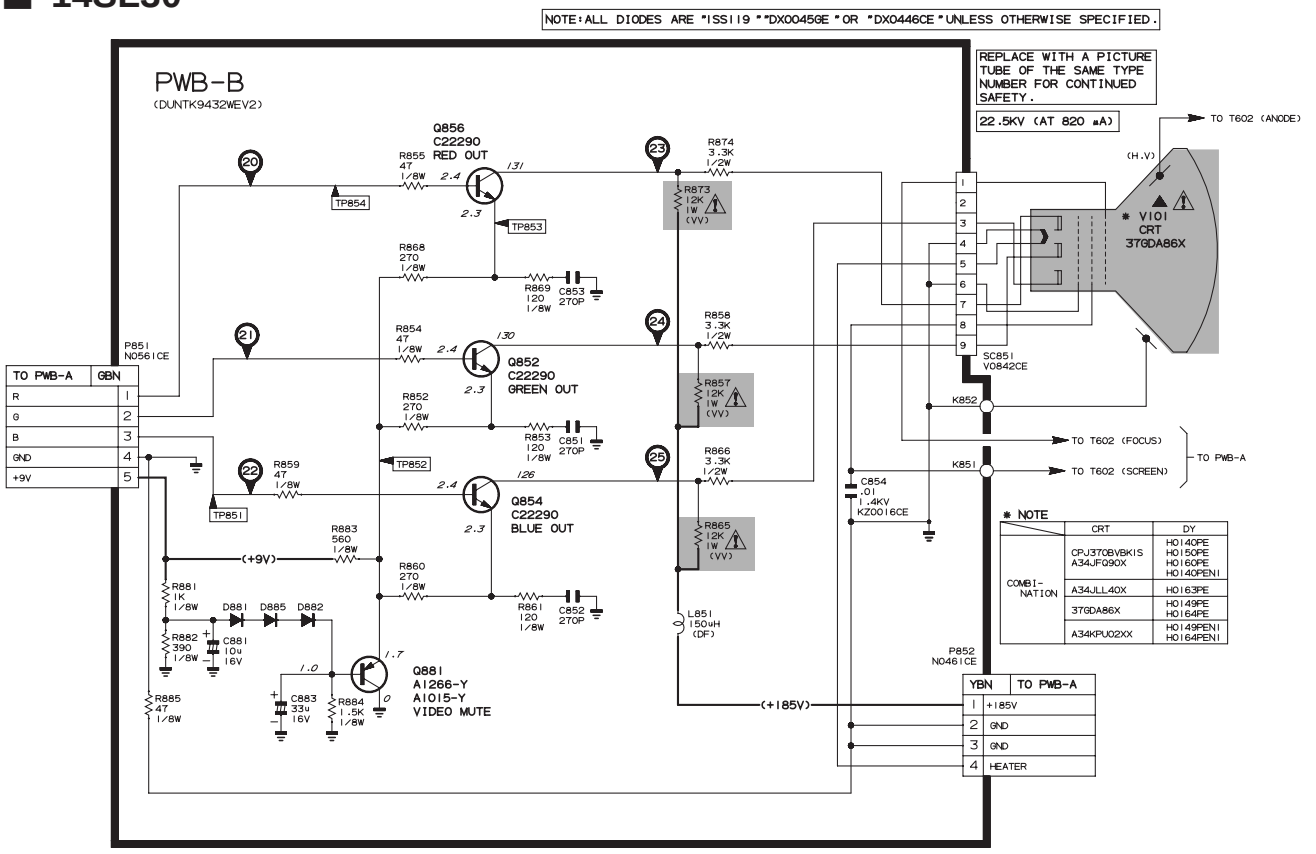
*This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.*

# WAVEFORMS

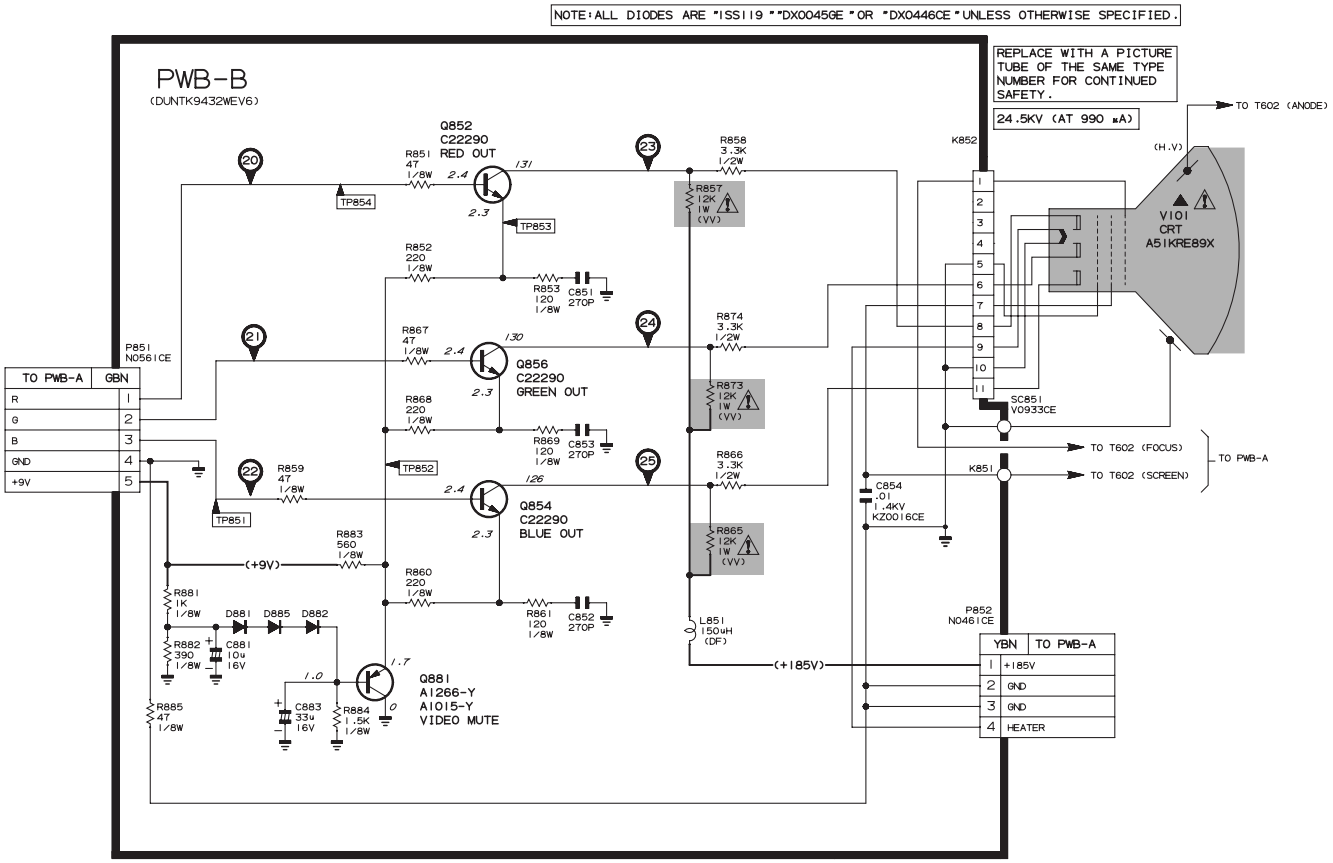


# SCHEMATIC DIAGRAM: CRT Unit

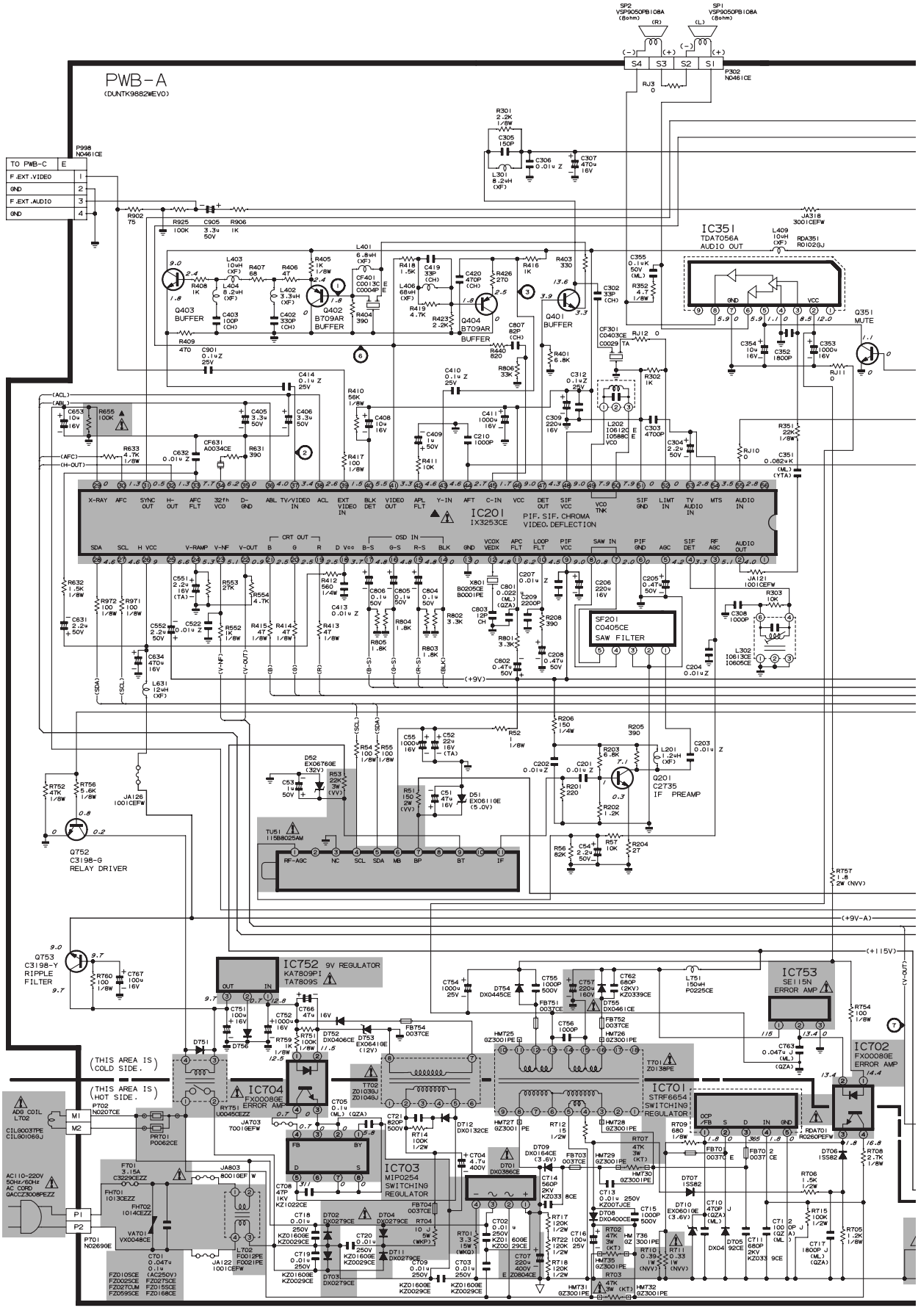
## ■ 14SL30

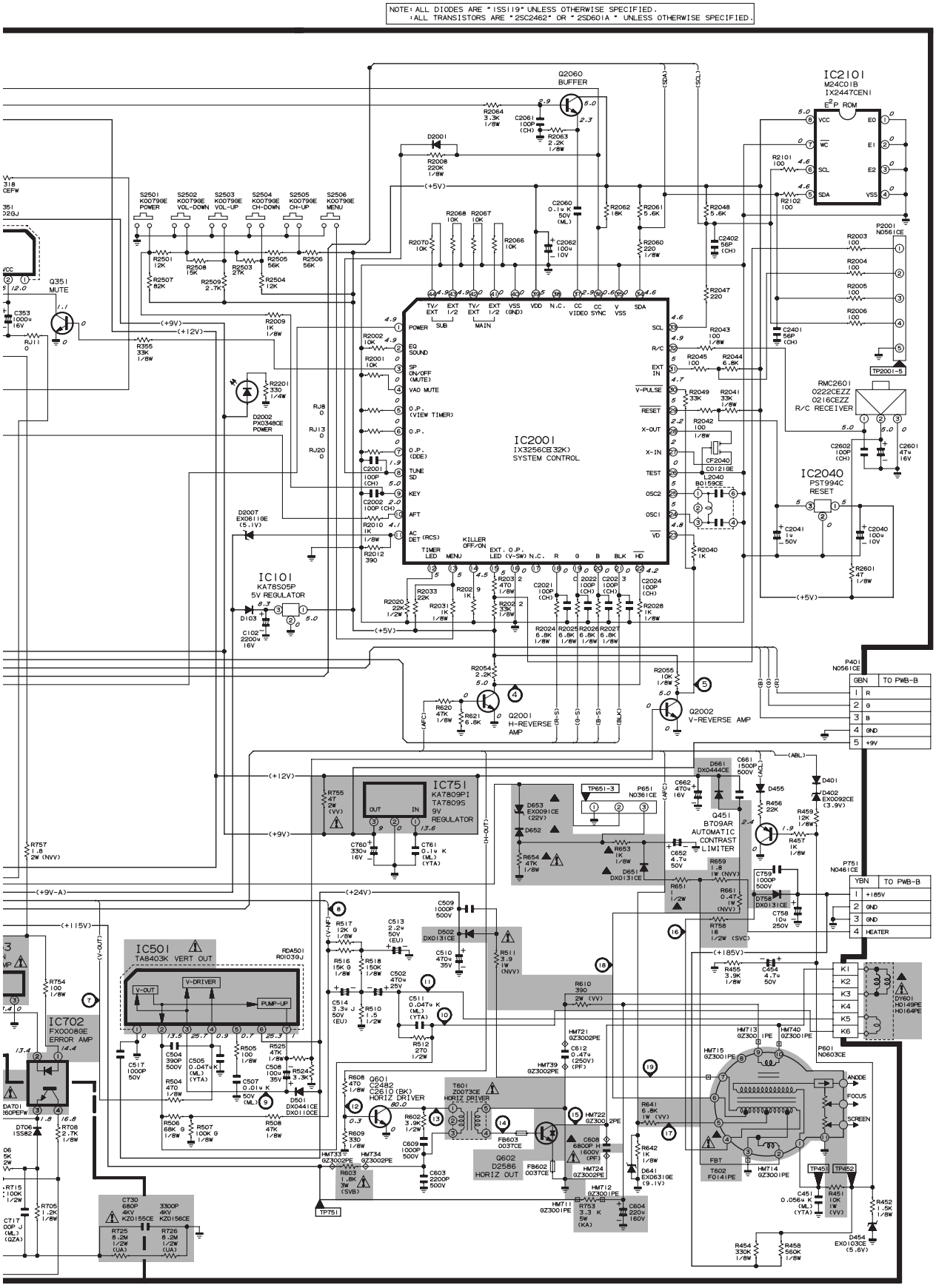



## ■ 21SL40/70



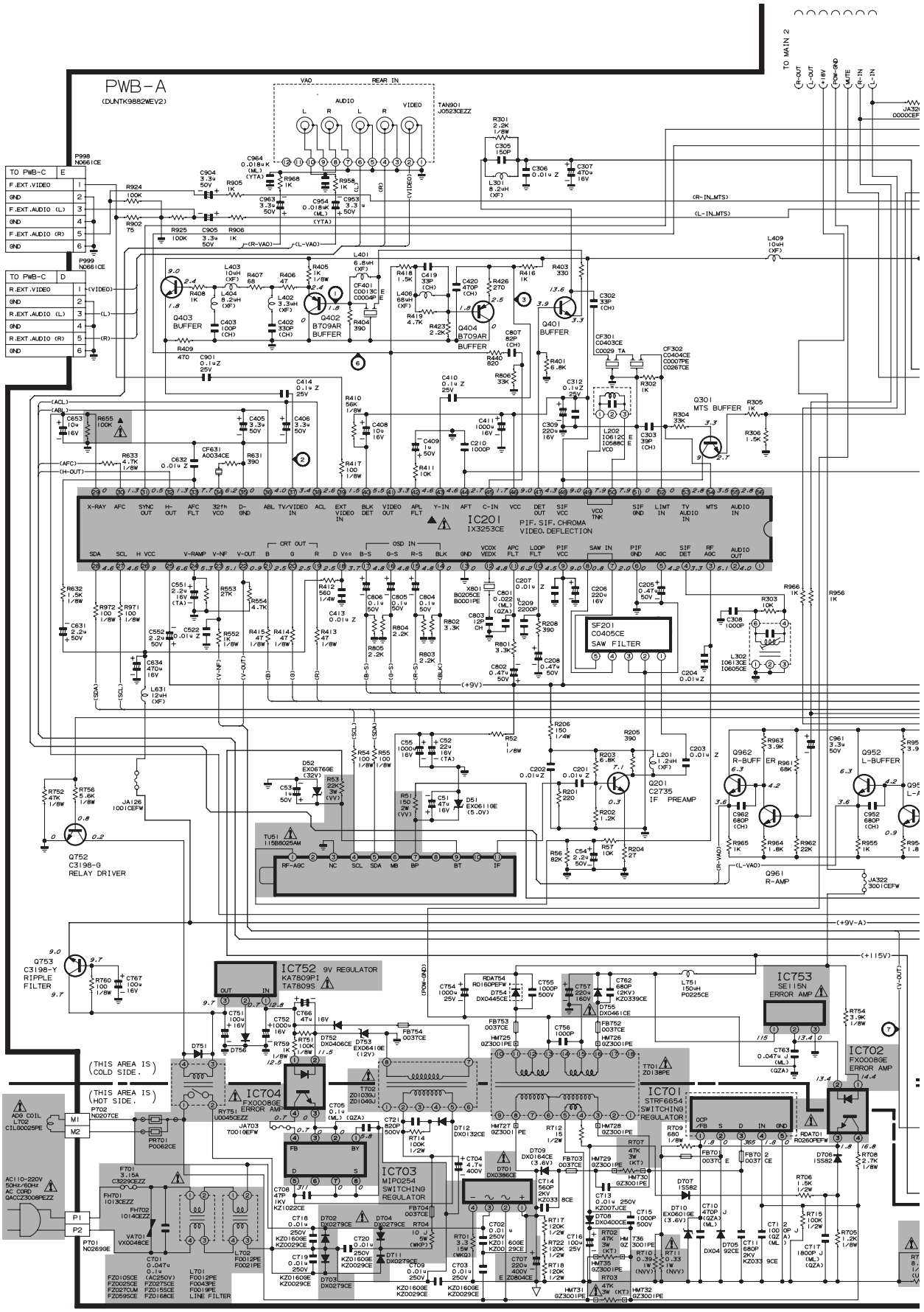
# MODEL 14SL30 SCHEMATIC DIAGRAM: MAIN-1 Unit

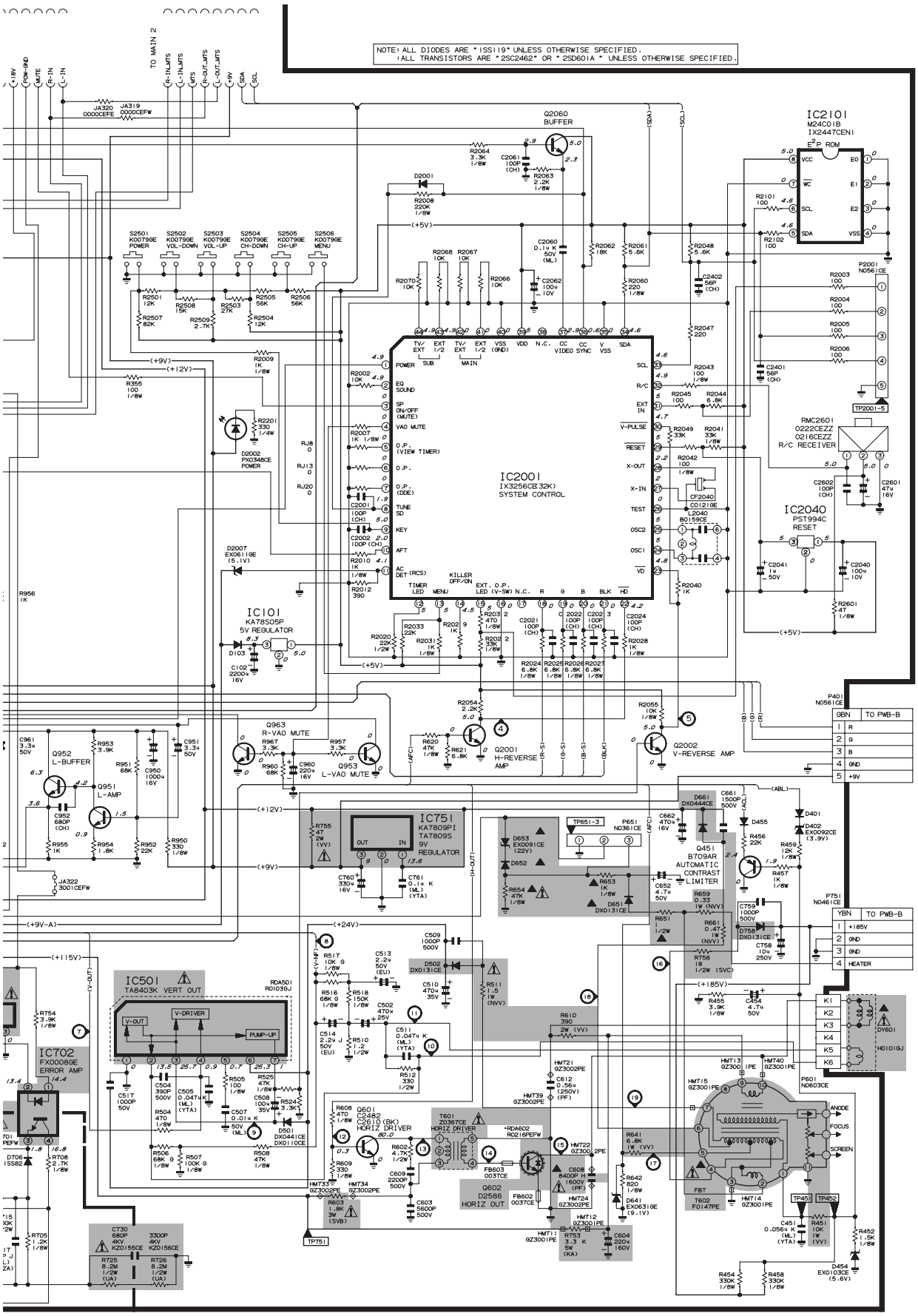





| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|

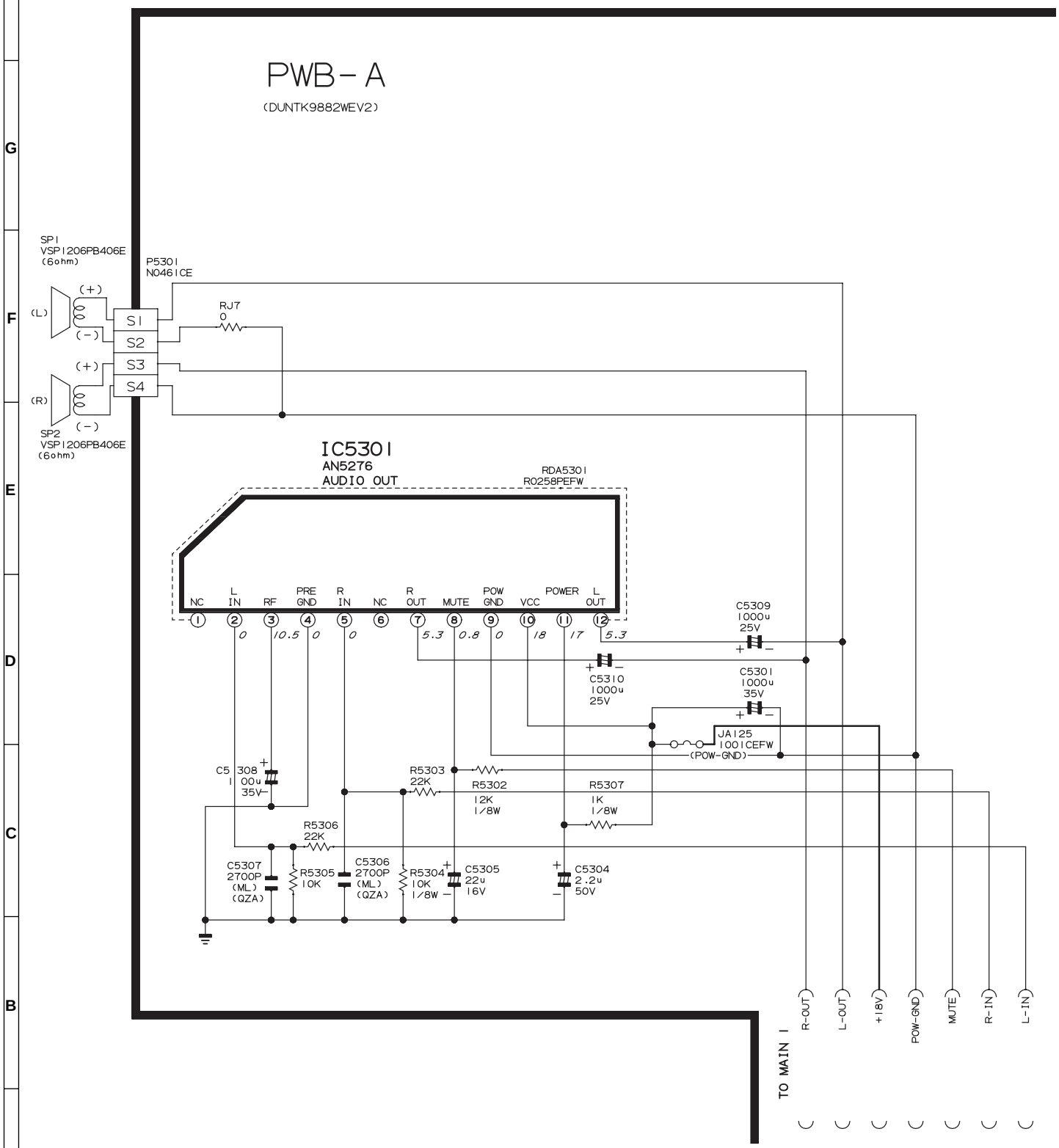
# MODEL 21SL70 SCHEMATIC DIAGRAM: MAIN-1 Unit

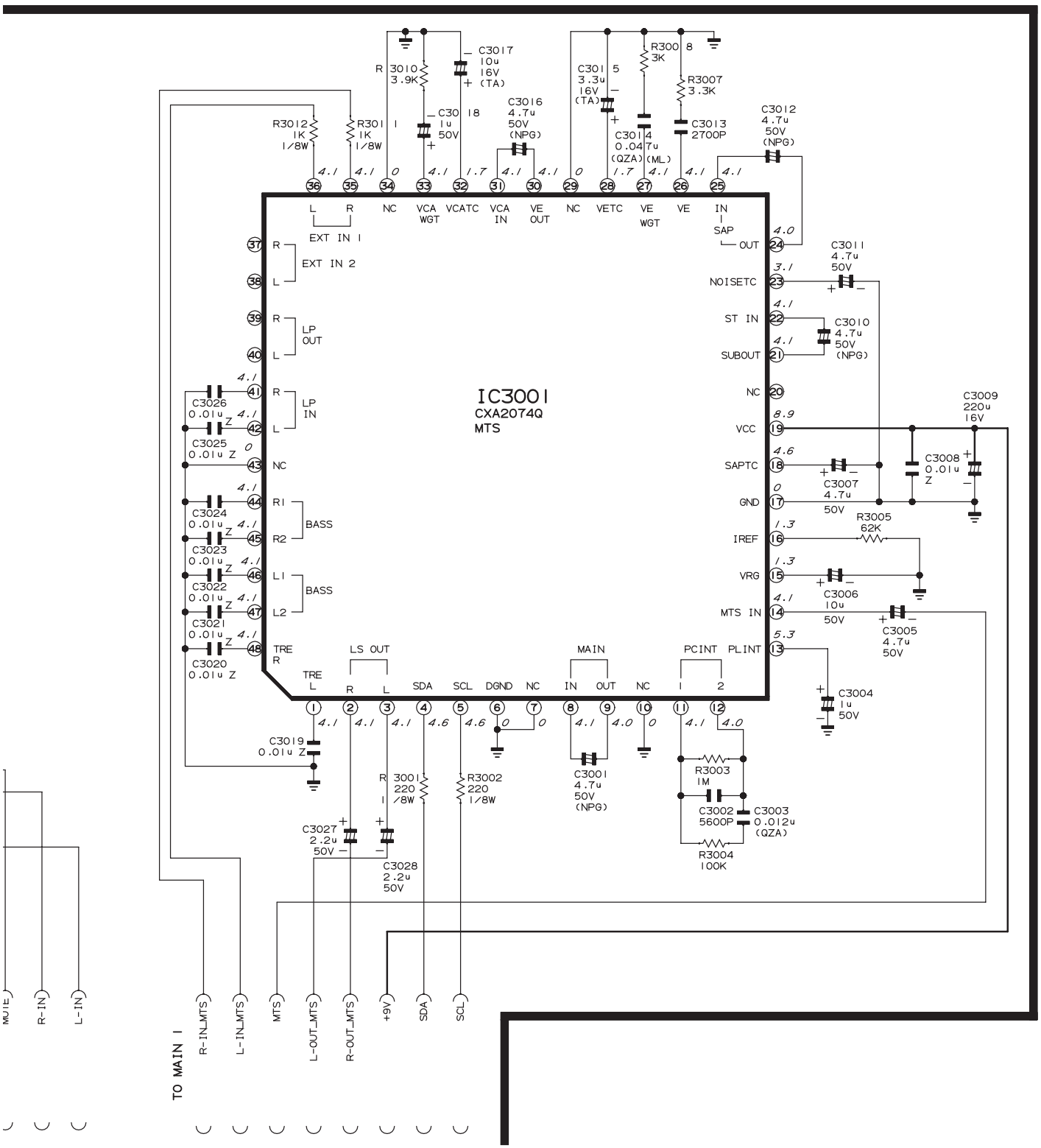





| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|

# MODEL 21SL70 SCHEMATIC DIAGRAM: MAIN-2 Unit

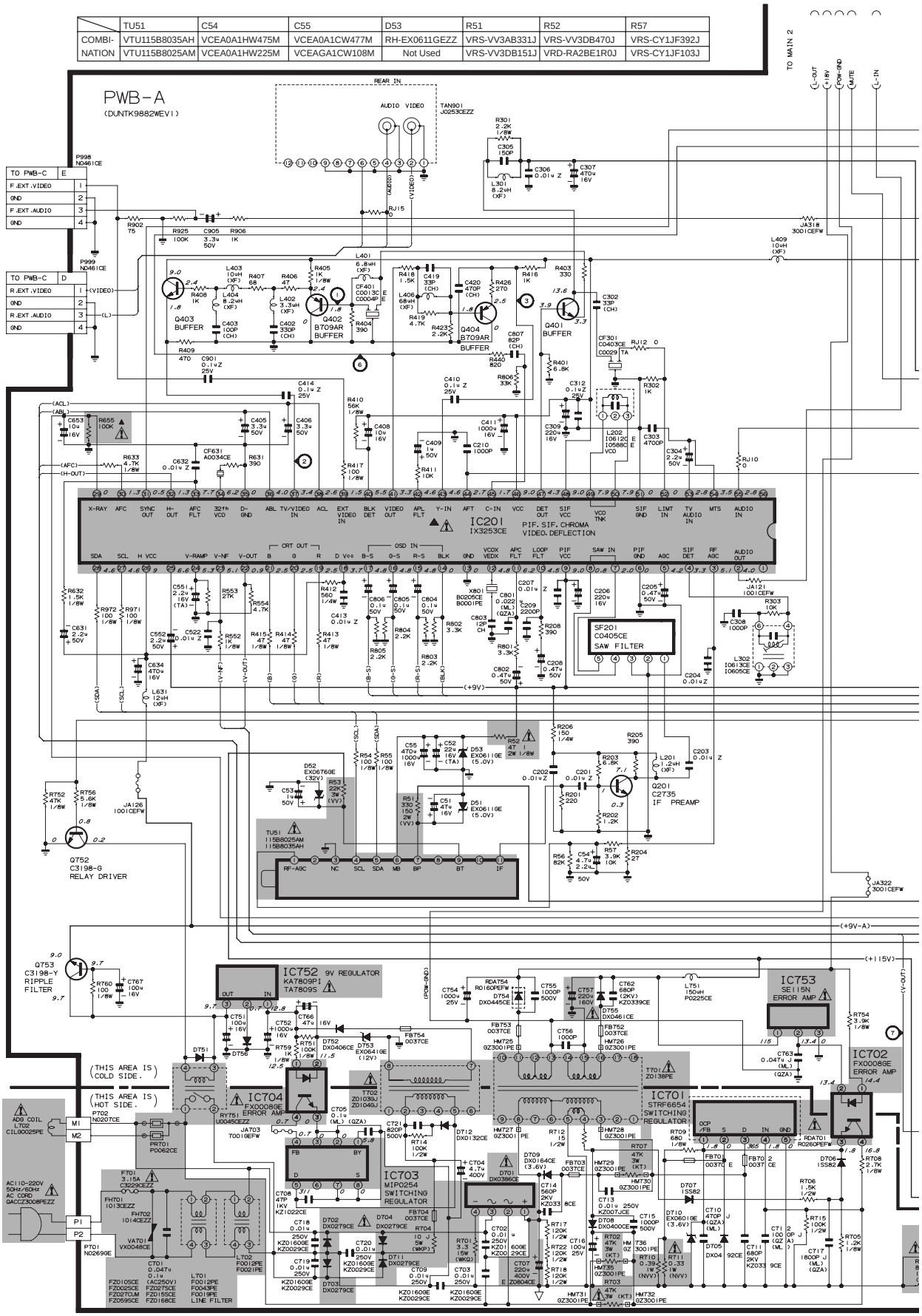


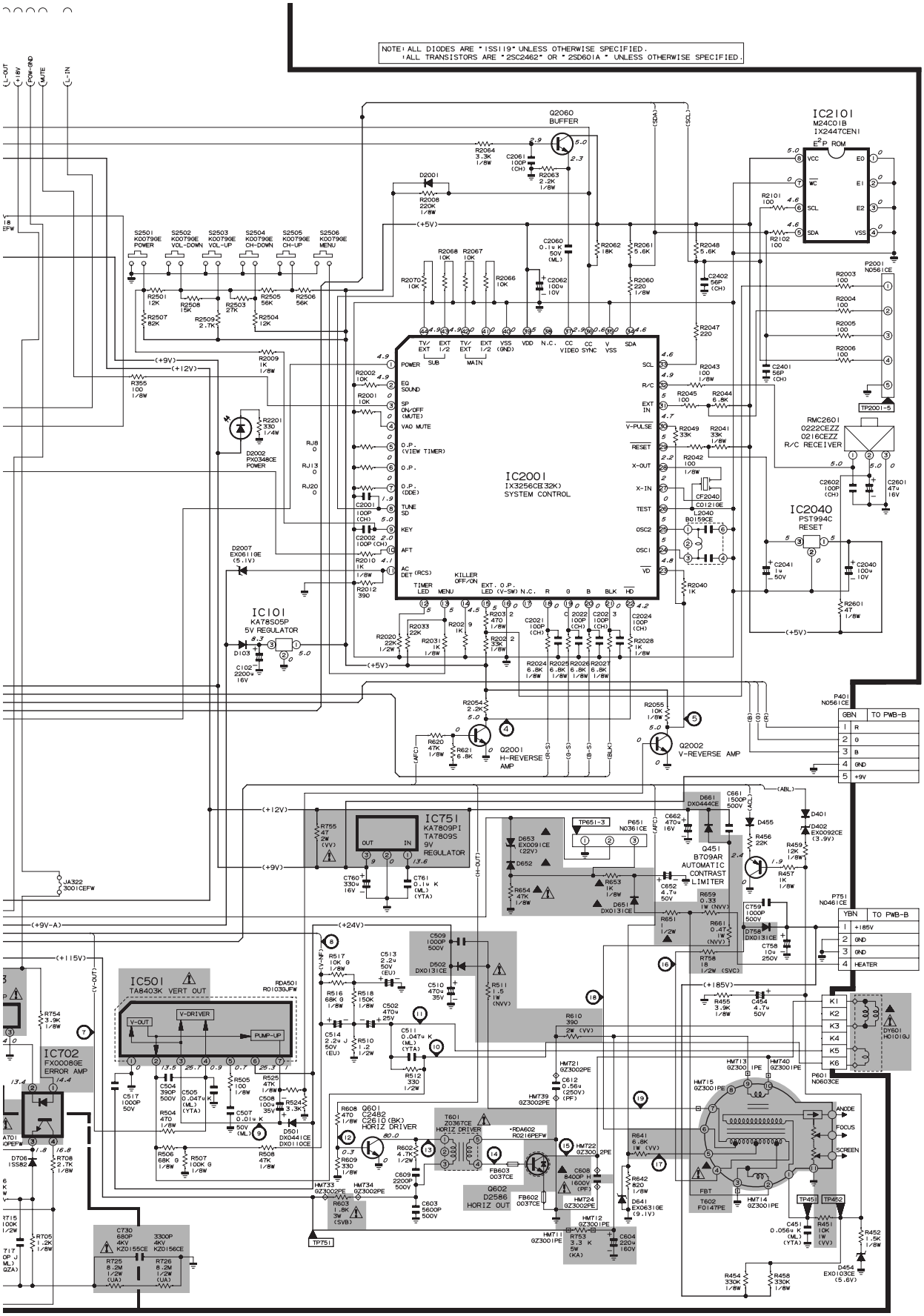



| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|

# MODEL 21SL40 SCHEMATIC DIAGRAM: MAIN-1 Unit

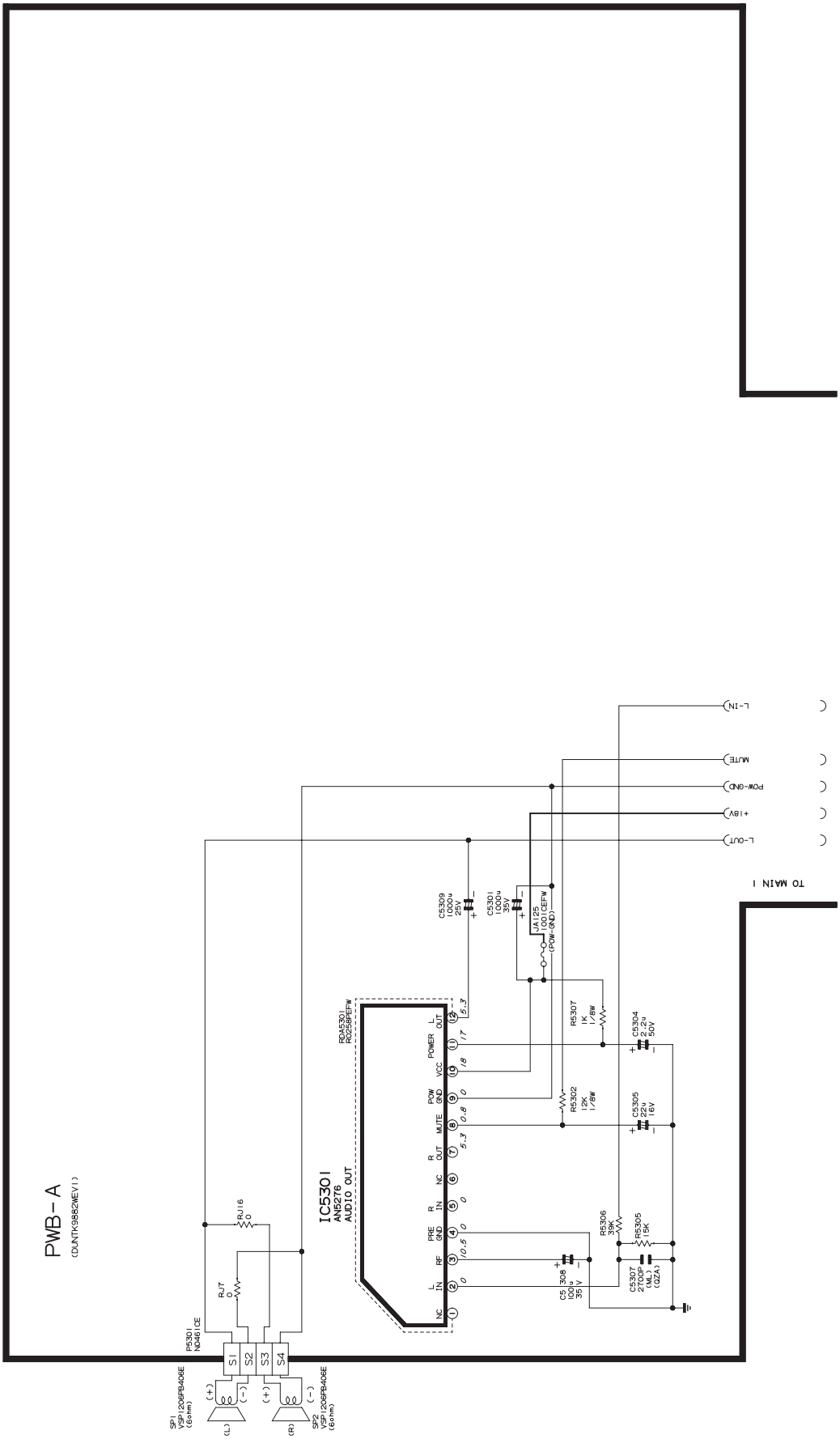
| | TU51 | C54 | C55 | D53 | R51 | R52 | R57 |
|---|---|---|---|---|---|---|---|
| COMBI- | VTU115B8035AH | VCEA0A1HW475M | VCEA0A1CW477M | RH-EX0611GEZZ | VRS-VV3AB331J | VRS-VV3DB470J | VRS-CY1JF392J |
| NATION | VTU115B8025AM | VCEA0A1HW225M | VCEAGA1CW108M | Not Used | VRS-VV3DB151J | VRD-RA2BE1R0J | VRS-CY1JF103J |


PWB–A
(DUNTK9882WEVI)
REAR IN
AUDIO VIDEO
TAN901 J0253CEZZ
TO MAIN 2
L-OUT
+16V
POW-GND
MUTE
L-IN
P998 N0461CE
TO PWB–C E
F.EXT.VIDEO
GND
F.EXT.AUDIO
GND
P999 N0461CE
TO PWB–C D
R.EXT.VIDEO
GND
R.EXT.AUDIO
GND
IC201 IX3253CE
PIF. SIF. CHROMA
VIDEO. DEFLECTION
X-RAY AFC SYNC OUT H-OUT AFC FLT 32fh VCO D-GND ABL TV/VIDEO IN ACL EXT VIDEO IN BLK DET VIDEO OUT APL FLT Y-IN AFT C-IN VCC DET OUT SIF VCC VCO TNK SIF GND LIMT IN TV AUDIO IN MTS AUDIO IN
SDA SCL H VCC V-RAMP V-NF V-OUT CRT OUT B G R D Vcc OSD IN B-S G-S R-S BLK GND VCOX VEDX APC FLT LOOP FLT PIF VCC SAW IN PIF GND AGC SIF DET RF AGC AUDIO OUT
Q403 BUFFER
Q402 BT09AR BUFFER
Q404 BT09AR BUFFER
Q401 BUFFER
SF201 C0405CE SAW FILTER
Q752 C3198-G RELAY DRIVER
Q753 C3198-Y RIPPLE FILTER
IC752 9V REGULATOR KA7809PI TA7809S
IC753 SE115N ERROR AMP
IC702 FX0008GE ERROR AMP
IC704 FX0008GE ERROR AMP
IC703 MIP0254 SWITCHING REGULATOR
IC701 STRF6654 SWITCHING REGULATOR
Q201 C2735 IF PREAMP
TU51 115B8025AM 115B8035AH
RF-AGC NC SCL SDA MB BP BT IF
(THIS AREA IS) (COLD SIDE.)
(THIS AREA IS) (HOT SIDE.)
AC110-220V 50Hz/60Hz AC CORD QACCZ3008PEZZ
(+9V-A)
(+115V)
(+9V)



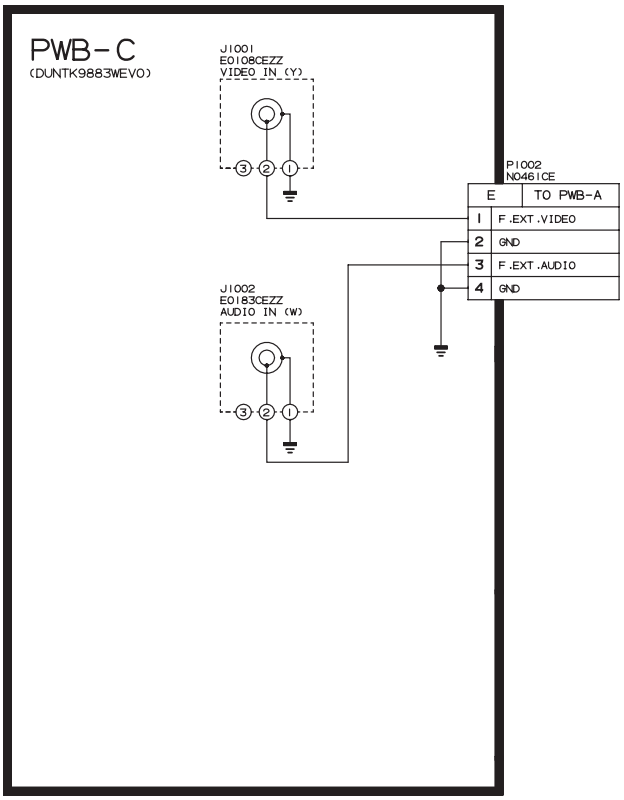

| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|

# MODEL 21SL40 SCHEMATIC DIAGRAM: MAIN-2 Unit

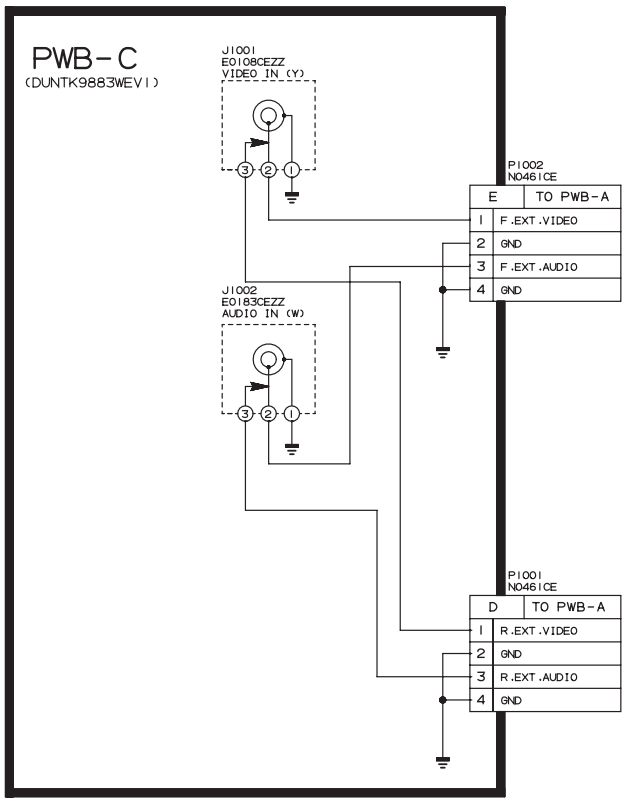


# SCHEMATIC DIAGRAM: FRONT AV Unit

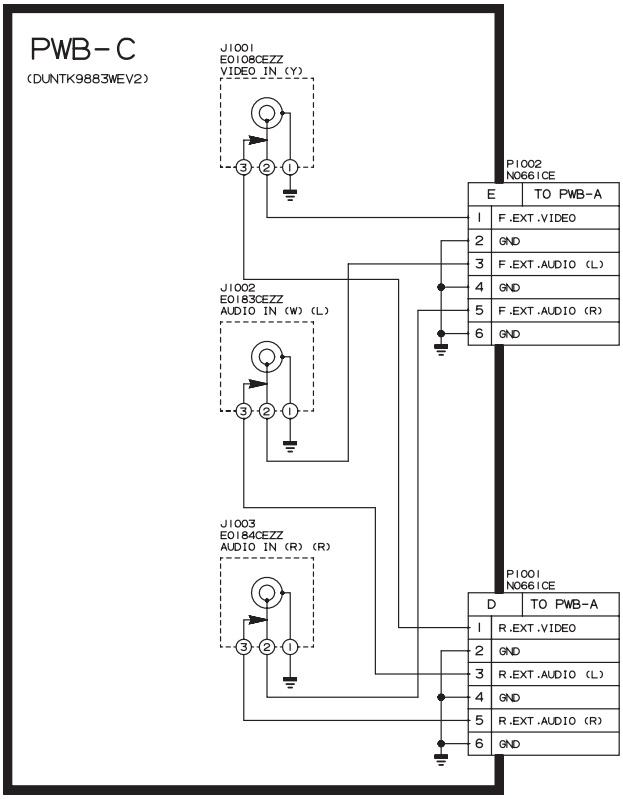
## ■ 14SL30



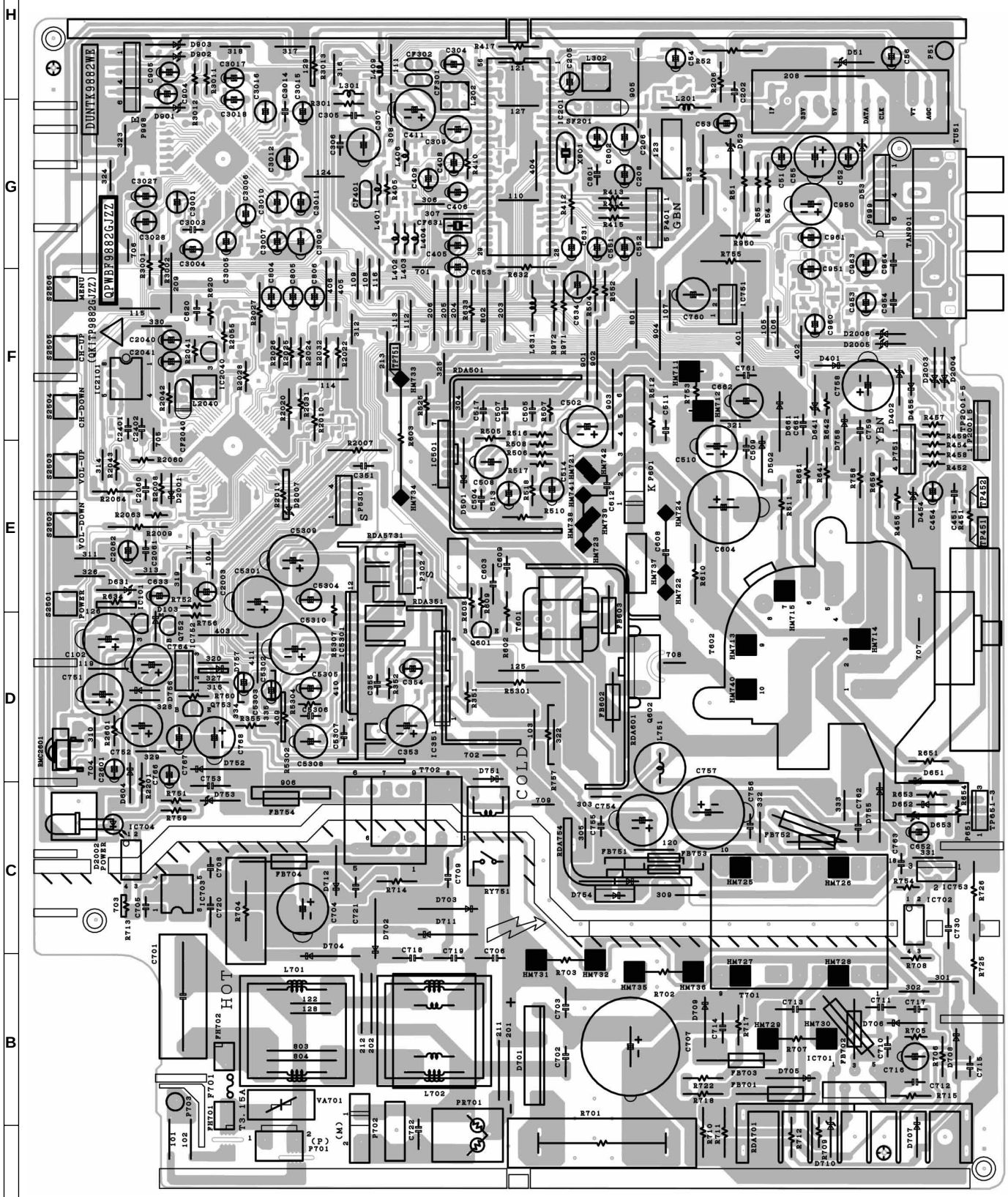

## ■ 21SL40



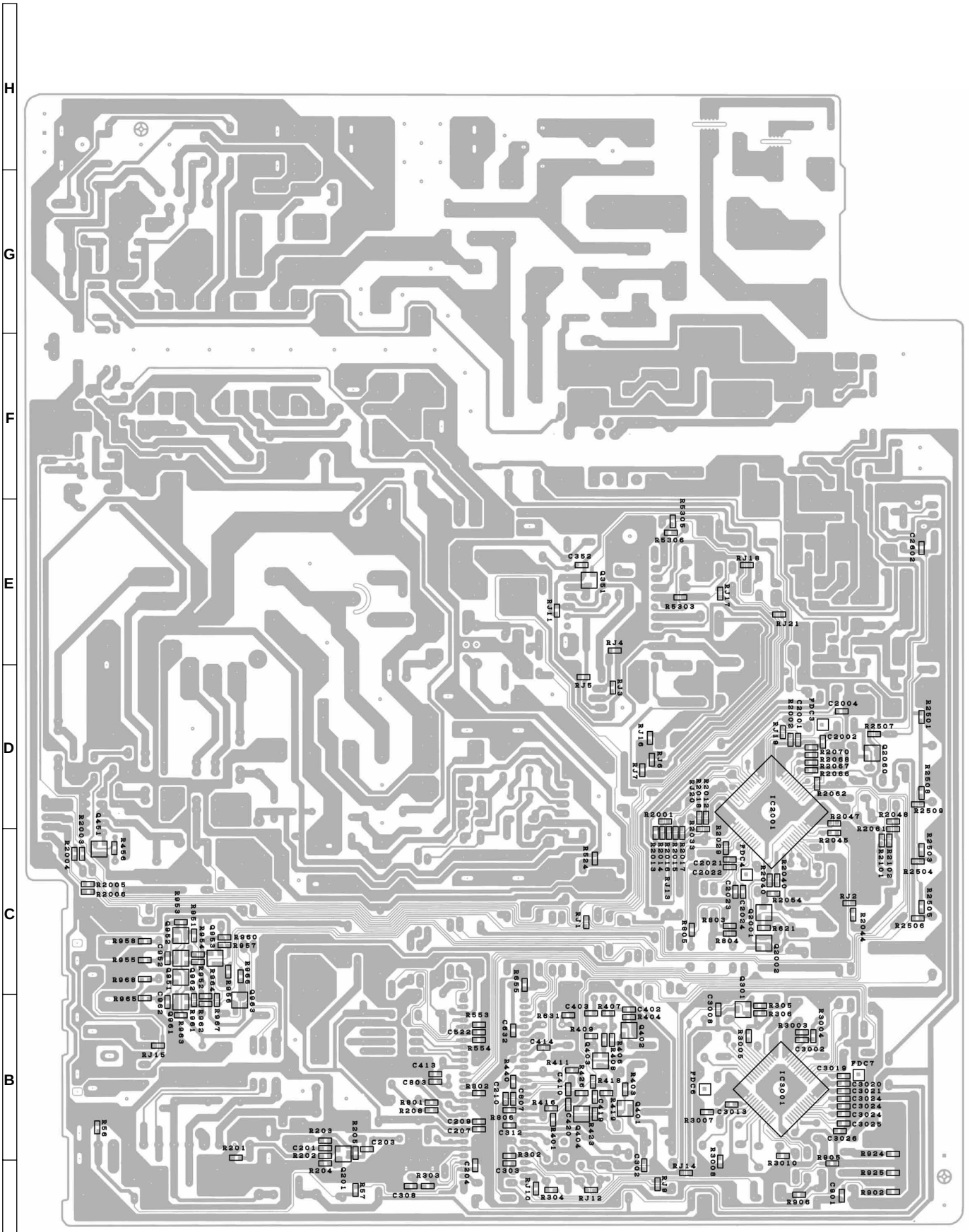

## ■ 21SL70



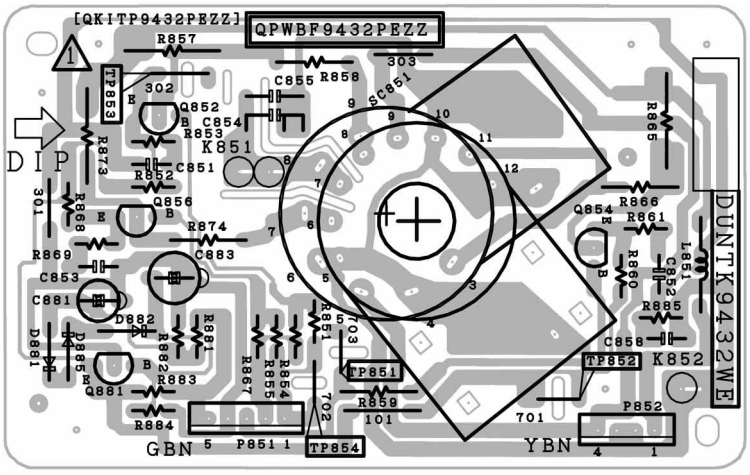
# PRINTED WIRING BOARD ASSEMBLIES



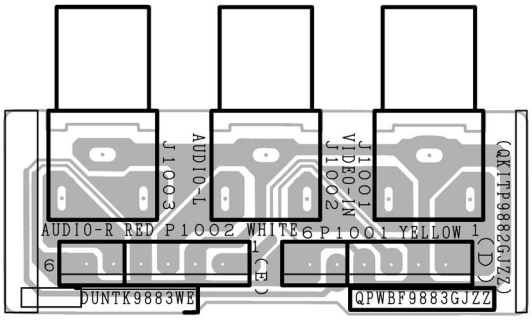
**PWB-A: MAIN Unit (Wiring Side)**



**PWB-A: MAIN Unit (Chip Parts Side)**




**PWB-B: CRT Unit (Wiring Side)**




**PWB-C: FRONT AV Unit (Wiring Side)**

# PARTS LIST

## PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which dose no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

### "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

★MARK : SPARE PARTS-DELIVERY SECTION

▲MARK : X- RAY RELATED PARTS

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

## PICTURE TUBE

### 14SL30

| | | | | |
|---|---|---|---|---|
| ▲⚠ V101 | VB370BVBK1S-S | R | CRT (DY601:H0140PE, H0150PE, | BZ |
| | or | | H0160PE, H0140PEN1) | |
| | VB34JFQ90X/*S | | CRT (DY601:H0140PE, H0150PE, | |
| | or | | H0160PE, H0140PEN1) | |
| | VB34KPU02X/*S | | CRT (DY601:H0149PEN1, | |
| | or | | H0164PEN1) | |
| | VB34JLL40X/*S | | CRT (DY601:H0163PE) | |
| | or | | | |
| | VB37GDA86X/1E | | CRT (DY601:H0149PE, H0164PE) | |
| ▲⚠ DY601 | RCiLH0140PEZZ | R | DY (CRT:CPJ370BVBK1S | BC |
| | or | | or A34JFQ90X) | |
| | RCiLH01050PEZZ | | DY (CRT:CPJ370BVBK1S | |
| | or | | or A34JFQ90X) | |
| | RCiLH0160PEZZ | | DY (CRT:CPJ370BVBK1S | |
| | or | | or A34JFQ90X) | |
| | RCiLH0140PEN1 | | DY (CRT:CPJ370BVBK1S | |
| | or | | or A34JFQ90X) | |
| | RCiLH0149PEZZ | | DY (CRT:37GD86X) | |
| | or | | | |
| | RCiLH0149PEN1 | | DY (CRT:A34KPU02XX) | |
| | or | | | |
| | RCiLH0163PEZZ | | DY (CRT:A34JLL40X) | |
| | or | | | |
| | RCiLH0164PEZZ | | DY (CRT:37GDA86X) | |
| | or | | | |
| | RCiLH0164PEN1 | | DY (CRT:A34KPU02XX) | |

| | CRT | DY |
|---|---|---|
| COMBI-NATION | CPJ370BVBK1S<br>A34JFQ90X | H0140PE<br>H0150PE<br>H0160PE<br>H0140PEN1 |
| | A34JLL40X | H0163PE |
| | 37GDA86X | H0149PE<br>H0164PE |
| | A34KPU02XX | H0149PEN1<br>H0164PEN1 |

| | | | | |
|---|---|---|---|---|
| ⚠ L702 | RCiLG0106GJZZ | X | Degaussing Coil | |
| | or | | | |
| | RCiLG0037PEZZ | | | |
| | PMAGF3041CEZZ | J | Magnet | AG |
| | QEARC1433PEZZ | R | Grounding Part | AF |

### 21SL40, 21SL70

| | | | | |
|---|---|---|---|---|
| ▲⚠ V101 | VB51KRE89X/3E | X | Picture Tube | |
| ▲⚠ DY601 | RCiLH0101GJZZ | X | Deflection Yoke | |
| ⚠ L702 | RCiLG0025PEZZ | R | Degaussing Coil | AW |
| | PMAGF3003CEZZ | J | Magnet | AK |
| | QEARC2119PEZZ | R | Grounding Part | AG |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

## PRINTED WIRING BOARD ASSEMBLIES
## *(NOT REPLACEMENT ITEM)*

### 14SL30

| | | | | |
|---|---|---|---|---|
| PWB-A | DUNTK9882WEV0 | – | Main Unit | — |
| PWB-B | DUNTK9432WEV2 | – | CRT Unit | — |
| PWB-C | DUNTK9883WEV0 | – | Front AV Unit | — |

### 21SL40

| | | | | |
|---|---|---|---|---|
| PWB-A | DUNTK9882WEV1 | – | Main Unit | — |
| PWB-B | DUNTK9432WEV6 | – | CRT Unit | — |
| PWB-C | DUNTK9883WEV1 | – | Front AV Unit | — |

### 21SL70

| | | | | |
|---|---|---|---|---|
| PWB-A | DUNTK9882WEV2 | – | Main Unit | — |
| PWB-B | DUNTK9432WEV6 | – | CRT Unit | — |
| PWB-C | DUNTK9883WEV2 | – | Front AV Unit | — |

## PWB-A: DUNTK9882WEV1 (21SL40)
## MAIN UNIT

### TUNER

***NOTE : THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.***

| | | | | |
|---|---|---|---|---|
| ⚠ TU51 | VTU115B8035AH | X | Tuner | AH |
| | or | | | |
| | VTU115B8025AM | | | |

| | COMBINATION | |
|---|---|---|
| TU51 | VTU115B8035AH | VTU115B8025AM |
| C54 | VCEA0A1HW475M | VCEA0A1HW225M |
| C55 | VCEA0A1CW477M | VCEAGA1CW108M |
| D53 | RH-EX0611GEZZ | Not Used |
| R51 | VRS-VV3AB331J | VRS-VV3DB151J |
| R52 | VRS-VV3DB470J | VRD-RA2BE1R0J |
| R57 | VRS-CY1JF392J | VRS-CY1JF103J |

### INTEGRATED CIRCUITS

| | | | | |
|---|---|---|---|---|
| IC101 | VHiKA78S05P-1 | J | KA78S05P | AD |
| ▲⚠ IC201 | RH-iX3253CEZZ | J | TA1268AN | AV |
| ⚠ IC501 | VHiTA8403K/-1 | J | TA8403K | AL |
| ⚠ IC701 | VHiSTRF6654-1 | J | STRF6654 | AX |
| ⚠ IC702 | RH-FX0008GEZZ | J | PC123FY8 | AE |
| ⚠ IC703 | VHiMiP0254/-1 | X | MIP0254 | |
| ⚠ IC704 | RH-FX0008GEZZ | J | PC123FY8 | AE |
| ⚠ IC751 | VHiKA7809Pi-1 | M | KA7809PI | AE |
| | or | | | |
| | VHiTA7809S/-1 | | | |
| ⚠ IC752 | VHiKA7809Pi-1 | M | KA7809PI | AE |
| | or | | | |
| | VHiTA7809S/-1 | | | |
| ⚠ IC753 | VHiSE115N//-1 | J | SE115N | AF |
| IC2001 | RH-iX3256CEZZ | J | TMPA8701CMF142 | AX |
| IC2040 | VHiPST994C/-1 | J | PST994C | AD |
| IC2101 | VHiM24C01B/-1 | J | M24C01-BN6 | AF |
| | or | | | |
| | RH-iX2447CEN1 | | | |
| IC5301 | VHiAN5276//-1 | J | AN5276 | AR |

### TRANSISTORS

You can substitute "VC2SC2462-C-1" for "VS2SD601AR/-1".

| | | | | |
|---|---|---|---|---|
| Q201 | VS2SC2735//1E | J | 2SC2735 | AC |
| Q401 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q402 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q403 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q404 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q451 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q601 | VS2SC2482//-1 | J | 2SC2482 | AD |
| | or | | | |
| | VS2SC2610/-1E | | | |
| ⚠ Q602 | VS2SD2586//1E | J | 2SD2586 | AM |
| Q752 | VS2SC3198-G-1 | J | 2SC3198(G) | AA |

# PWB-A: DUNTK9882WEV1 (21SL40)
## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| Q753 | VS2SC3198-Y-1 | J | 2SC3198(Y) | AA |
| Q2001 | VS2SD601AR/-1 | J | 2SD601 AR | AC |
| Q2002 | VS2SD601AR/-1 | J | 2SD601 AR | AC |
| Q2060 | VS2SC2462-C-1 | J | 2SC2462(C) | AB |
| | **DIODES** | | | |
| D51 | RH-EX0611GEZZ | J | Zener Diode, 5.1V | AA |
| D52 | RH-EX0676GEZZ | J | Zener Diode, 32V | AA |
| D53 | RH-EX0611GEZZ | J | Zener Diode, 5.1V | AA |
| D103 | VHD1SS119//-1 | J | Diode | AB |
| D401 | VHD1SS119//-1 | J | Diode | AB |
| D402 | RH-EX0092CEZZ | J | Zener Diode, 3.9V | AB |
| D454 | RH-EX0103CEZZ | J | Zener Diode, 5.6V | AB |
| D455 | VHD1SS119//-1 | J | Diode | AB |
| D501 | RH-DX0441CEZZ<br>or<br>RH-DX0110CEZZ | J | Diode | AC |
| ⚠ D502 | RH-DX0131CEZZ | J | Diode | AC |
| D641 | RH-EX0631GEZZ | J | Zener Diode, 9.1V | AA |
| ▲⚠ D651 | RH-DX0131CEZZ | J | Diode | AC |
| ▲⚠ D652 | VHD1SS119//-1 | J | Diode | AB |
| ▲⚠ D653 | RH-EX0091CEZZ | J | Zener Diode, 22V | AB |
| ⚠ D661 | RH-DX0444CEZZ | J | Diode | AH |
| ⚠ D701 | RH-DX0386CEZZ | J | Diode | AG |
| ⚠ D702 | RH-DX0279CEZZ | J | Diode | AB |
| ⚠ D703 | RH-DX0279CEZZ | J | Diode | AB |
| ⚠ D704 | RH-DX0279CEZZ | J | Diode | AB |
| D705 | RH-DX0492CEZZ | J | Diode | AE |
| D706 | VHD1SS82///1A | J | Diode | AC |
| D707 | VHD1SS82///1A | J | Diode | AC |
| D708 | RH-DX0400CEZZ | J | Diode | AC |
| D709 | RH-DX0164CEZZ | J | Diode | AC |
| D710 | RH-EX0601GEZZ | J | Zener Diode, 3.6V | AA |
| ⚠ D711 | RH-DX0279CEZZ | J | Diode | AB |
| D712 | RH-DX0132CEZZ | J | Diode | AC |
| D751 | VHD1SS119//-1 | J | Diode | AB |
| D752 | RH-DX0406CEZZ | J | Diode | AD |
| D753 | RH-EX0641GEZZ | J | Zener Diode, 12V | AA |
| D754 | RH-DX0445CEZZ | J | Diode | AL |
| D755 | RH-DX0461CEZZ | J | Diode | AG |
| D756 | VHD1SS119//-1 | J | Diode | AB |
| ⚠ D758 | RH-DX0131CEZZ | J | Diode | AC |
| D2001 | VHD1SS119//-1 | J | Diode | AB |
| D2002 | RH-PX0348CEZZ | J | Photodiode | AB |
| D2007 | RH-EX0611GEZZ | J | Zener Diode, 5.1V | AA |
| ⚠ VA701 | RH-VX0048CEZZ | J | Varistor | AE |
| | **PACKGED CIRCUITS** | | | |
| ⚠ PR701 | RMPTP0062CEZZ | J | Packaged Circuit | AH |
| X801 | RCRSB0205CEZZ<br>or<br>RCRSB0001PEZZ | J | Crystal | AF |
| | **FILTERS** | | | |
| CF301 | RFiLC0403CEZZ<br>or<br>RFiLC0029TAZZ | J | Ceramic Filter | AE |
| CF401 | RFiLC0013CEZZ<br>or<br>RFiLC0004PEZZ | J | Ceramic Filter | AE |
| CF631 | RFiLA0034CEZZ | J | Ceramic Filter | AD |
| CF2040 | RFiLC0121GEZZ | J | Ceramic Filter | AD |
| SF201 | RFiLC0405CEZZ | J | SAW Filter | AH |
| | **COILS** | | | |
| L201 | VP-XF1R2K0000 | J | Peaking 1.2µH | AB |
| L202 | RCiLi0612CEZZ<br>or<br>RCiLi0588CEZZ | J | IF Coil | AE |
| L301 | VP-XF8R2K0000 | J | Peaking 8.2µH | AB |
| L302 | RCiLi0613CEZZ<br>or<br>RCiLi0605CEZZ | J | IF Coil | AE |
| L401 | VP-XF6R8K0000 | J | Peaking 6.8µH | AB |
| L402 | VP-XF3R3K0000 | J | Peaking 3.3µH | AB |
| L403 | VP-XF100K0000 | J | Peaking 10µH | AB |
| L404 | VP-XF8R2K0000 | J | Peaking 8.2µH | AB |
| L406 | VP-XF680K0000 | J | Peaking 68µH | AB |
| L409 | VP-XF100K0000 | J | Peaking 10µH | AB |
| L631 | VP-XF120K0000 | J | Peaking 12µH | AB |
| ⚠ L701 | RCiLF0012PEZZ<br>or<br>RCiLF0043PEZZ<br>or<br>RCiLF0019PEZZ | R | Coil | AN |
| ⚠ L702 | RCiLF0012PEZZ<br>or<br>RCiLF0021PEZZ | R | Coil | AN |
| L751 | RCiLP0225CEZZ | J | Coil | AF |
| L2040 | RCiLB0159CEZZ | J | Oscillation Coil | AE |
| | **TRANSFORMERS** | | | |
| ⚠ T601 | RTRNZ0367CEZZ | J | H-Driver | AK |
| ▲⚠ T602 | RTRNF0147PEZZ | R | F.B.T | BC |
| ⚠ T701 | RTRNZ0138PEZZ | R | Transformer | AW |
| ⚠ T702 | RTRNZ0103GJZZ<br>or<br>RTRNZ0104GJZZ | X | Transformer | |
| | **CAPACITORS** | | | |
| | *[EL.··· Electrolytic, M-Poly.··· Metalized Polypro Film]* | | | |
| C51 | VCEA0A1CW476M | J | 47 16V EL. | AB |
| C52 | VCSATA1CE226K | J | 22 16V Tantalum | AD |
| C53 | VCEA0A1HW105M | J | 1.0 50V EL. | AB |
| C54 | VCEA0A1HW475M<br>or<br>VCEA0A1HW225M | J | 4.7 50V EL.<br>2.2 50V EL. | AB |
| C55 | VCEA0A1CW477M<br>or<br>VCEAGA1CW108M | J | 470 16V EL.<br>1000 16V EL. | AC |
| C102 | VCEAGA1CW228M | J | 2200 16V EL. | AE |
| C201 | VCKYCY1HF103Z | J | 0.01 50V Ceramic | AA |
| C202 | VCKYPA1HF103Z | J | 0.01 50V Ceramic | AA |
| C203 | VCKYCY1HF103Z | J | 0.01 50V Ceramic | AA |
| C204 | VCKYCY1HF103Z | J | 0.01 50V Ceramic | AA |
| C205 | VCEA0A1HW474M | J | 0.47 50V EL. | AB |
| C206 | VCEA0A1CW227M | J | 220 16V EL. | AC |
| C207 | VCKYCY1HF103Z | J | 0.01 50V Ceramic | AA |
| C208 | VCEA0A1HW474M | J | 0.47 50V EL. | AB |
| C209 | VCKYCY1HB222K | J | 2200p 50V Ceramic | AA |
| C210 | VCKYCY1HB102K | J | 1000p 50V Ceramic | AA |
| C302 | VCCCCY1HH330J | J | 33p 50V Ceramic | AA |
| C303 | VCKYCY1HB472K | J | 4700p 50V Ceramic | AA |
| C304 | VCEA0A1HW225M | J | 2.2 50V EL. | AB |
| C305 | VCKYPA1HB151K | J | 150p 50V Ceramic | AA |
| C306 | VCKYPA1HF103Z | J | 0.01 50V Ceramic | AA |
| C307 | VCEA0A1CW477M | J | 470 16V EL. | AC |
| C308 | VCKYCY1HB102K | J | 1000p 50V Ceramic | AA |
| C309 | VCEA0A1CW227M | J | 220 16V EL. | AC |
| C312 | VCKYCY1EF104Z | J | 0.1 25V Ceramic | AA |
| C402 | VCCCCY1HH331J | J | 330p 50V Ceramic | AA |
| C403 | VCCCCY1HH101J | J | 100p 50V Ceramic | AA |
| C405 | VCEA0A1HW335M | J | 3.3 50V EL. | AB |
| C406 | VCEA0A1HW335M | J | 3.3 50V EL. | AB |
| C408 | VCEA0A1CW106M | J | 10 16V EL. | AB |
| C409 | VCEA0A1HW105M | J | 1.0 50V EL. | AB |
| C410 | VCKYCY1EF104Z | J | 0.1 25V Ceramic | AA |
| C411 | VCEAGA1CW108M | J | 1000 16V EL. | AD |
| C413 | VCKYCY1HF103Z | J | 0.01 50V Ceramic | AA |
| C414 | VCKYCY1EF104Z | J | 0.1 25V Ceramic | AA |
| C419 | VCCCCY1HH330J | J | 33p 50V Ceramic | AA |
| C420 | VCCCCY1HH471J | J | 470p 50V Ceramic | AA |
| C451 | VCQYTA1HM563K | J | 0.056 50V Mylar | AB |
| C454 | VCEA0A1HW475M | J | 4.7 50V EL. | AB |
| C502 | VCEA0A1EW477M | J | 470 25V EL. | AD |
| C504 | VCKYPA2HB391K | J | 390p 500V Ceramic | AA |
| C505 | VCQYTA1HM473K | J | 0.047 50V Mylar | AB |

# PWB-A: DUNTK9882WEV1 (21SL40)
## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | | | Description | Code |
|---|---|---|---|---|---|---|
| C507 | VCQYTA1HM103K | J | 0.01 | 50V | Mylar | AB |
| C508 | VCEAGA1VW107M | J | 100 | 35V | EL. | AC |
| C509 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C510 | VCEAGA1VW477M | J | 470 | 35V | EL. | AD |
| C511 | VCQYTA1HM473K | J | 0.047 | 50V | Mylar | AB |
| C513 | VCEACA1HC225M | J | 2.2 | 50V | EL. | AC |
| C514 | VCEACA1HC225J | J | 2.2 | 50V | EL. | AC |
| C517 | VCKYPA1HB102K | J | 1000p | 50V | Ceramic | AA |
| C522 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C551 | VCSATA1CE225K | J | 2.2 | 16V | Tantalu | AB |
| C552 | VCEA0A1HW225M | J | 2.2 | 50V | EL. | AB |
| C603 | VCKYPA2HB562K | J | 5600p | 500V | Ceramic | AC |
| ⚠ C604 | VCEAGH2CW227M | J | 220 | 160V | EL. | AH |
| ▲⚠ C608 | VCFPPD3CA842H | J | 8400p | 1.6kV | M-Poly | AE |
| C609 | VCKYPA2HB222K | J | 2200p | 500V | Ceramic | AA |
| C612 | VCFPPJ2EB564J | J | 0.56 | 250V | M-Poly. | AF |
| C631 | VCEA0A1HW225M | J | 2.2 | 50V | EL. | AB |
| C632 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C634 | VCEA0A1CW477M | J | 470 | 16V | EL. | AC |
| C652 | VCEA0A1HW475M | J | 4.7 | 50V | EL. | AB |
| C653 | VCEA0A1CW106M | J | 10 | 16V | EL. | AB |
| C661 | VCKYPA2HB152K | J | 1500p | 500V | Ceramic | AA |
| C662 | VCEA0A1CW477M | J | 470 | 16V | EL. | AC |
| ⚠ C701 | RC-FZ027SCEZZ | J | 0.047 | AC250V | Plastic | AD |
| | or | | | | | |
| | RC-FZ015SCEZZ | | | | | |
| | or | | | | | |
| | RC-FZ0168CEZZ | | | | | |
| | or | | | | | |
| | RC-FZ010SCEZZ | | | | | |
| | or | | | | | |
| | RC-FZ002SCEZZ | | | | | |
| | or | | | | | |
| | RC-FZ027CUMZZ | | | | | |
| | or | | | | | |
| | RC-FZ059SCEZZ | | | | | |
| C702 | RC-KZ0160GEZZ | J | 0.01 | AC250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C703 | RC-KZ0160GEZZ | J | 0.01 | AC250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C704 | VCEA0A2GW475M | J | 4.7 | 400V | EL. | AE |
| C705 | RC-QZA104TAYK | J | 0.1 | 50V | Mylar | AB |
| ⚠ C707 | RC-EZ0804CEZZ | J | 220 | 400V | EL. | AU |
| C708 | RC-KZ1022CEZZ | J | 47p | 1kV | Ceramic | AC |
| C709 | RC-KZ0160GEZZ | J | 0.01 | 250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C710 | RC-QZA471TAYJ | J | 470p | 50V | Mylar | AB |
| C711 | RC-KZ0339CEZZ | J | 680p | 2kV | Ceramic | AD |
| C712 | RC-QZA102TAYJ | J | 1000p | 50V | Mylar | AB |
| C713 | RC-KZ007JCEZZ | J | 0.01 | 250V | Ceramic | AC |
| C714 | RC-KZ0338CEZZ | J | 560p | 2kV | Ceramic | AD |
| C715 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C716 | VCEAGA1EW107M | J | 100 | 25V | EL. | AD |
| C717 | RC-QZA182TAYJ | J | 1800p | 50V | Mylar | AB |
| C718 | RC-KZ0160GEZZ | J | 0.01 | 250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C719 | RC-KZ0160GEZZ | J | 0.01 | 250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C720 | RC-KZ0160GEZZ | J | 0.01 | 250V | Ceramic | AC |
| | or | | | | | |
| | RC-KZ0029CEZZ | | | | | |
| C721 | VCKYPA2HB821K | J | 820p | 500V | Ceramic | AA |
| ⚠ C730 | RC-KZ0155CEZZ | J | 680p | 4kV | Ceramic | AE |
| | or | | | | | |
| | RC-KZ0156CEZZ | | 3300p | 4kV | | |
| C751 | VCEA0A1CW107M | J | 100 | 16V | EL. | AC |
| C752 | VCEA0A1CW108M | J | 1000 | 16V | EL. | AD |
| C754 | VCEAGA1EW108M | J | 1000 | 25V | EL. | AD |
| C755 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C756 | VCKYD41HB102K | J | 1000p | 50V | Ceramic | AA |
| ⚠ C757 | VCEA4W2CN227M | J | 220 | 160V | EL. | AG |
| C758 | VCEAGA2EW106M | J | 10 | 250V | EL. | AC |
| C759 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C760 | VCEA0A1CW337M | J | 330 | 16V | EL. | AC |
| C761 | VCQYTA1HM104K | J | 0.1 | 50V | Mylar | AC |
| C762 | RC-KZ0339CEZZ | J | 680p | 2kV | Ceramic | AD |
| C763 | RC-QZA473TAYJ | J | 0.047 | 50V | Mylar | AB |
| C766 | VCEA0A1CW476M | J | 47 | 16V | EL. | AB |
| C767 | VCEA0A1CW107M | J | 100 | 16V | EL. | AC |
| C801 | RC-QZA223TAYK | J | 0.022 | 50V | Mylar | AB |
| C802 | VCEA0A1HW474M | J | 0.47 | 50V | EL. | AB |
| C803 | VCCCCY1HH120J | J | 12p | 50V | Ceramic | AA |
| C804 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C805 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C806 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C807 | VCCCCY1HH820J | J | 82p | 50V | Ceramic | AA |
| C901 | VCKYCY1EF104Z | J | 0.1 | 25V | Ceramic | AA |
| C905 | VCEA0A1HW335M | J | 3.3 | 50V | EL. | AB |
| C2001 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2002 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2021 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2022 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2023 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2024 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2040 | VCEA0A1AW107M | J | 100 | 10V | EL. | AB |
| C2041 | VCEA0A1HW105M | J | 1.0 | 50V | EL. | AB |
| C2060 | VCQYTA1HM104K | J | 0.1 | 50V | Mylar | AC |
| C2061 | VCCCPA1HH101J | J | 100p | 50V | Ceramic | AA |
| C2062 | VCEA0A1AW107M | J | 100 | 10V | EL. | AB |
| C2401 | VCCCPA1HH560J | J | 56p | 50V | Ceramic | AA |
| C2402 | VCCCPA1HH560J | J | 56p | 50V | Ceramic | AA |
| C2601 | VCEA0A1CW476M | J | 47 | 16V | EL. | AB |
| C2602 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C5301 | VCEAGA1VW108M | J | 1000 | 35V | EL. | AD |
| C5304 | VCEAGA1HW225M | J | 2.2 | 50V | EL. | AB |
| C5305 | VCEAGA1CW226M | J | 22 | 16V | EL. | AB |
| C5307 | RC-QZA272TAYK | J | 2700p | 50V | Mylar | AB |
| C5308 | VCEAGA1VW107M | J | 100 | 35V | EL. | AC |
| C5309 | VCEAGA1EW108M | J | 1000 | 25V | EL. | AD |

## RESISTORS

*[M-Ox.··· Metal Oxide, M-Film ··· Metal Film]*

| | | | | | | |
|---|---|---|---|---|---|---|
| RJ1 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ2 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ7 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ8 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ10 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ12 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ13 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ14 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ15 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ17 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ18 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ19 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| RJ20 | VRS-CY1JF000J | J | 0 | 1/16W | M-Ox. | AA |
| ⚠ R51 | VRS-VV3AB331J | J | 330 | 1W | M-Ox. | AA |
| | or | | | | | |
| | VRS-VV3DB151J | | 150 | 2W | M-Ox. | |
| ⚠ R52 | VRS-VV3DB470J | J | 47 | 2W | M-Ox. | AA |
| | or | | | | | |
| | VRD-RA2BE1R0J | | 1.0 | 1/8W | Carbon | |
| ⚠ R53 | VRS-VV3LB223J | J | 22k | 3W | M-Ox. | AB |
| R54 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R55 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R56 | VRS-CY1JF823J | J | 82k | 1/16W | M-Ox. | AA |
| R57 | VRS-CY1JF392J | J | 3.9k | 1/16W | M-Ox. | AA |
| | or | | | | | |
| | VRS-CY1JF103J | | 10k | 1/16W | M-Ox. | |
| R201 | VRS-CY1JF221J | J | 220 | 1/16W | M-Ox. | AA |
| R202 | VRS-CY1JF122J | J | 1.2k | 1/16W | M-Ox. | AA |
| R203 | VRS-CY1JF682J | J | 6.8k | 1/16W | M-Ox. | AA |
| R204 | VRS-CY1JF270J | J | 27 | 1/16W | M-Ox. | AA |
| R205 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |

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## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | | | Description | Code |
|---|---|---|---|---|---|---|
| R206 | VRD-RA2EE151J | J | 150 | 1/4W | Carbon | AA |
| R208 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R301 | VRD-RA2BE222J | J | 2.2k | 1/8W | Carbon | AA |
| R302 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R303 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R355 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R401 | VRS-CY1JF682J | J | 6.8k | 1/16W | M-Ox. | AA |
| R403 | VRS-CY1JF331J | J | 330 | 1/16W | M-Ox. | AA |
| R404 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R405 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R406 | VRS-CY1JF470J | J | 47 | 1/16W | M-Ox. | AA |
| R407 | VRS-CY1JF680J | J | 68 | 1/16W | M-Ox. | AA |
| R408 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R409 | VRS-CY1JF471J | J | 470 | 1/16W | M-Ox. | AA |
| R410 | VRD-RA2BE563J | J | 56k | 1/8W | Carbon | AA |
| R411 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R412 | VRD-RA2EE561J | J | 560 | 1/4W | Carbon | AA |
| R413 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| R414 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| R415 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| R416 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R417 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R418 | VRS-CY1JF152J | J | 1.5k | 1/16W | M-Ox. | AA |
| R419 | VRS-CY1JF472J | J | 4.7k | 1/16W | M-Ox. | AA |
| R423 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. | AA |
| R426 | VRS-CY1JF271J | J | 270 | 1/16W | M-Ox. | AA |
| R440 | VRS-CY1JF821J | J | 820 | 1/16W | M-Ox. | AA |
| ⚠ R451 | VRS-VV3AB103J | J | 10k | 1W | M-Ox. | AA |
| R452 | VRD-RA2BE152J | J | 1.5k | 1/8W | Carbon | AA |
| R454 | VRD-RA2BE334J | J | 330k | 1/8W | Carbon | AA |
| R455 | VRD-RA2BE392J | J | 3.9k | 1/8W | Carbon | AA |
| R456 | VRS-CY1JF223J | J | 22k | 1/16W | M-Ox. | AA |
| R457 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R458 | VRD-RA2BE334J | J | 330k | 1/8W | Carbon | AA |
| R459 | VRD-RA2BE123J | J | 12k | 1/8W | Carbon | AA |
| R504 | VRD-RA2BE471J | J | 470 | 1/8W | Carbon | AA |
| R505 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AA |
| R506 | VRD-RA2BE683G | J | 68k | 1/8W | Carbon | AA |
| R507 | VRD-RA2BE104G | J | 100k | 1/8W | Carbon | AA |
| R508 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| R510 | VRD-RM2HD1R2J | J | 1.2 | 1/2W | Carbon | AA |
| ⚠ R511 | VRN-VV3AB1R5J | J | 1.5 | 1W | M-Film | AA |
| R512 | VRD-RM2HD331J | J | 330 | 1/2W | Carbon | AA |
| R516 | VRD-RA2BE683G | J | 68k | 1/8W | Carbon | AA |
| R517 | VRD-RA2BE103G | J | 10k | 1/8W | Carbon | AA |
| R518 | VRD-RA2BE154J | J | 150k | 1/8W | Carbon | AA |
| R524 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R525 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| R552 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R553 | VRS-CY1JF273J | J | 27k | 1/16W | M-Ox. | AA |
| R554 | VRS-CY1JF472J | J | 4.7k | 1/16W | M-Ox. | AA |
| R602 | VRD-RM2HD472J | J | 4.7k | 1/2W | Carbon | AA |
| ⚠ R603 | VRS-SV3LB182J | J | 1.8k | 3W | M-Ox. | AB |
| R608 | VRD-RA2BE471J | J | 470 | 1/8W | Carbon | AA |
| R609 | VRD-RA2BE331J | J | 330 | 1/8W | Carbon | AA |
| ⚠ R610 | VRS-VV3DB391J | J | 390 | 2W | M-Ox. | AA |
| R620 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| R621 | VRS-CY1JF682J | J | 6.8k | 1/16W | M-Ox. | AA |
| R631 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R632 | VRD-RA2BE152J | J | 1.5k | 1/8W | Carbon | AA |
| R633 | VRD-RA2BE472J | J | 4.7k | 1/8W | Carbon | AA |
| ⚠ R641 | VRS-VV3AB682J | J | 6.8k | 1W | M-Ox. | AA |
| R642 | VRD-RA2BE821J | J | 820 | 1/8W | Carbon | AA |
| ▲⚠ R651 | VRD-RM2HD1R0J | J | 1.0 | 1/2W | Carbon | AA |
| ▲⚠ R653 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| ▲⚠ R654 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| ▲⚠ R655 | VRS-CY1JF104J | J | 100k | 1/16W | M-Ox. | AA |
| ⚠ R659 | VRN-VV3ABR33J | J | 0.33 | 1W | M-Film | AA |
| ⚠ R661 | VRN-VV3ABR47J | J | 0.47 | 1W | M-Film | AA |
| ⚠ R701 | VRW-KQ41C3R3K | J | 3.3 | 15W | Cement | AG |
| ⚠ R702 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| ⚠ R703 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| ⚠ R704 | VRW-KP3HC100J | J | 10 | 5W | Cement | AD |
| R705 | VRD-RA2BE122J | J | 1.2k | 1/8W | Carbon | AA |
| R706 | VRD-RM2HD152J | J | 1.5k | 1/2W | Carbon | AA |
| ⚠ R707 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| R708 | VRD-RA2BE272J | J | 2.7k | 1/8W | Carbon | AA |
| R709 | VRD-RA2BE681J | J | 680 | 1/8W | Carbon | AA |
| ⚠ R710 | VRN-VV3ABR39J | J | 0.39 | 1W | M-Film | AA |
| ⚠ R711 | VRN-VV3ABR33J | J | 0.33 | 1W | M-Film | AA |
| R712 | VRD-RM2HD150J | J | 15 | 1/2W | Carbon | AA |
| R714 | VRD-RM2HD104J | J | 100k | 1/2W | Carbon | AA |
| R715 | VRD-RM2HD104J | J | 100k | 1/2W | Carbon | AA |
| R717 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| R718 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| R722 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| ⚠ R725 | VRC-UA2HG825K | J | 8.2M | 1/2W | Solid | AA |
| ⚠ R726 | VRC-UA2HG825K | J | 8.2M | 1/2W | Solid | AA |
| R751 | VRD-RA2BE104J | J | 100k | 1/8W | Carbon | AA |
| R752 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| ⚠ R753 | VRS-KA3HG3R3K | J | 3.3 | 5W | M-Ox. | AD |
| R754 | VRD-RA2BE392J | J | 3.9k | 1/8W | Carbon | AA |
| ⚠ R755 | VRS-VV3DB470J | J | 47 | 2W | M-Ox. | AA |
| R756 | VRD-RA2BE562J | J | 5.6k | 1/8W | Carbon | AA |
| ⚠ R758 | VRS-SV2HC180J | J | 18 | 1/2W | M-Ox. | AA |
| R759 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R760 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R801 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R802 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R803 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. | AA |
| R804 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. | AA |
| R805 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. | AA |
| R806 | VRS-CY1JF333J | J | 33k | 1/16W | M-Ox. | AA |
| R902 | VRS-CY1JF750J | J | 75 | 1/16W | M-Ox. | AA |
| R906 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R925 | VRS-CY1JF104J | J | 100k | 1/16W | M-Ox. | AA |
| R971 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R972 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R2001 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2002 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2003 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2004 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2005 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2006 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2008 | VRD-RA2BE224J | J | 220k | 1/8W | Carbon | AA |
| R2009 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2010 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2012 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R2020 | VRD-RM2HD223J | J | 22k | 1/2W | Carbon | AA |
| R2022 | VRD-RA2BE333J | J | 33k | 1/8W | Carbon | AA |
| R2024 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2025 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2026 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2027 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2028 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2029 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R2031 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2032 | VRD-RA2BE471J | J | 470 | 1/8W | Carbon | AA |
| R2033 | VRS-CY1JF223J | J | 22k | 1/16W | M-Ox. | AA |
| R2040 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R2041 | VRD-RA2BE333J | J | 33k | 1/8W | Carbon | AA |
| R2042 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R2043 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R2044 | VRS-CY1JF682J | J | 6.8k | 1/16W | M-Ox. | AA |
| R2045 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2047 | VRS-CY1JF221J | J | 220 | 1/16W | M-Ox. | AA |
| R2048 | VRS-CY1JF562J | J | 5.6k | 1/16W | M-Ox. | AA |
| R2049 | VRS-CY1JF333J | J | 33k | 1/16W | M-Ox. | AA |
| R2054 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. | AA |
| R2055 | VRD-RA2BE103J | J | 10k | 1/8W | Carbon | AA |
| R2060 | VRD-RA2BE221J | J | 220 | 1/8W | Carbon | AA |
| R2061 | VRS-CY1JF562J | J | 5.6k | 1/16W | M-Ox. | AA |
| R2062 | VRS-CY1JF183J | J | 18k | 1/16W | M-Ox. | AA |
| R2063 | VRD-RA2BE222J | J | 2.2k | 1/8W | Carbon | AA |
| R2064 | VRD-RA2BE332J | J | 3.3k | 1/8W | Carbon | AA |
| R2066 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2067 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2068 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

# PWB-A: DUNTK9882WEV1 (21SL40)
## MAIN UNIT (Continued)

| | | | | | | |
|---|---|---|---|---|---|---|
| R2070 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2101 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2102 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2201 | VRD-RA2EE331J | J | 330 | 1/4W | Carbon | AA |
| R2501 | VRS-CY1JF123J | J | 12k | 1/16W | M-Ox. | AA |
| R2503 | VRS-CY1JF273J | J | 27k | 1/16W | M-Ox. | AA |
| R2504 | VRS-CY1JF123J | J | 12k | 1/16W | M-Ox. | AA |
| R2505 | VRS-CY1JF563J | J | 56k | 1/16W | M-Ox. | AA |
| R2506 | VRS-CY1JF563J | J | 56k | 1/16W | M-Ox. | AA |
| R2507 | VRS-CY1JF823J | J | 82k | 1/16W | M-Ox. | AA |
| R2508 | VRS-CY1JF153J | J | 15k | 1/16W | M-Ox. | AA |
| R2509 | VRS-CY1JF272J | J | 2.7k | 1/16W | M-Ox. | AA |
| R2601 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| R5302 | VRD-RA2BE123J | J | 12k | 1/8W | Carbon | AA |
| R5305 | VRS-CY1JF153J | J | 15k | 1/16W | M-Ox. | AA |
| R5306 | VRS-CY1JF393J | J | 39k | 1/16W | M-Ox. | AA |
| R5307 | VRS-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |

### SWITCHES

| | | | | |
|---|---|---|---|---|
| S2501 | QSW-K0079GEZZ | J | Power | AB |
| S2502 | QSW-K0079GEZZ | J | Vol-Down | AB |
| S2503 | QSW-K0079GEZZ | J | Vol-Up | AB |
| S2504 | QSW-K0079GEZZ | J | Ch-Down | AB |
| S2505 | QSW-K0079GEZZ | J | Ch-Up | AB |
| S2506 | QSW-K0079GEZZ | J | Menu | AB |

### MISCELLANEOUS PARTS

| | | | | |
|---|---|---|---|---|
| ⚠ RY751 | RRLYU0045CEZZ | J | Relay | |
| ⚠ F701 | QFS-C3229CEZZ | J | Fuse, 3.15A (125V) | AD |
| FB602 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB603 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB701 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB702 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB703 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| ⚠ FB704 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB752 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB753 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB754 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FH701 | QFSHD1013CEZZ | J | Fuse Holder | AC |
| FH702 | QFSHD1014CEZZ | J | Fuse Holder | AC |
| P401 | QPLGN0561CEZZ | J | Plug, 5-pin (GBN) | AB |
| P601 | QPLGN0603CEZZ | J | Plug, 6-pin (K) | AB |
| P651 | QPLGN0361CEZZ | J | Plug, 3-pin | AB |
| P701 | QPLGN0269GEZZ | J | Plug, 2-pin (P) | AB |
| P702 | QPLGN0207CEZZ | J | Plug, 2-pin (M) | AA |
| P751 | QPLGN0461CEZZ | J | Plug, 4-pin (YBN) | AB |
| P998 | QPLGN0461CEZZ | J | Plug, 4-pin (E) | AB |
| P999 | QPLGN0461CEZZ | J | Plug, 4-pin (D) | AB |
| P2001 | QPLGN0561CEZZ | J | Plug, 5-pin | AB |
| P5301 | QPLGN0461CEZZ | J | Plug, 4-pin (S) | AB |
| RMC2601 | RRMCU0222CEZZ | J | R/C Receiver | AL |
| | or | | | |
| | RRMCU0216CEZZ | | | |
| RDA501 | PRDAR0103GJFW | X | Heat Sink, for IC501 | AN |
| RDA602 | PRDAR0216PEFW | R | Heat Sink, for Q602 | AE |
| RDA701 | PRDAR0260PEFW | R | Heat Sink, for IC701 | AH |
| RDA754 | PRDAR0160PEFW | X | Heat Sink, for D754 | AF |
| RDA5301 | PRDAR0258PEFW | R | Heat Sink, for IC5301 | AG |
| TAN901 | QTANJ0253CEZZ | J | Terminal | |
| | LHLDP1042PE00 | R | Holder | AG |
| | LHLDW1002PEZZ | R | Holder | AB |
| | LX-BZ0086TAFD | J | Screw | AA |
| | LX-BZ3100CEFD | J | Screw | AA |
| | LX-TZ3004CEFD | J | Screw | AA |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

# PWB-A: DUNTK9882WEV0 (14SL30)
# PWB-A: DUNTK9882WEV2 (21SL70)
## MAIN UNIT

### TUNER

***NOTE : THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.***

| | | | | | |
|---|---|---|---|---|---|
| ⚠ TU51 | VTU115B8025AM | X | Tuner | | BA |

### INTEGRATED CIRCUITS

| | | | | |
|---|---|---|---|---|
| IC101 | VHiKA78S05P-1 | J | KA78S05P | AD |
| ▲⚠ IC201 | RH-iX3253CEZZ | J | TA1268AN | AV |
| IC351 | VHiTDA7056A-1 | J | TDA7056A (14SL30) | AP |
| ⚠ IC501 | VHiTA8403K/-1 | J | TA8403K | AL |
| ⚠ IC701 | VHiSTRF6654-1 | J | STRF6654 | AX |
| ⚠ IC702 | RH-FX0008GEZZ | J | PC123FY8 | AE |
| ⚠ IC703 | VHiMiP0254/-1 | X | MIP0254 | |
| ⚠ IC704 | RH-FX0008GEZZ | J | PC123FY8 | AE |
| ⚠ IC751 | VHiKA7809Pi-1 | M | KA7809PI | AE |
| | or | | | |
| | VHiTA7809S/-1 | | | |
| ⚠ IC752 | VHiKA7809Pi-1 | M | KA7809PI | AE |
| | or | | | |
| | VHiTA7809S/-1 | | | |
| ⚠ IC753 | VHiSE115N//-1 | J | SE115N | AF |
| IC2001 | RH-iX3256CEZZ | J | TMPA8701CMF142 | AX |
| IC2040 | VHiPST994C/-1 | J | PST994C | AD |
| IC2101 | VHiM24C01B/-1 | J | M24C01-BN6 | AF |
| | or | | | |
| | RH-iX2447CEN1 | | | |
| IC3001 | VHiCXA2074Q-1 | J | CXA2074Q (21SL70) | AY |
| IC5301 | VHiAN5276//-1 | J | AN5276 (21SL70) | AR |

### TRANSISTORS

You can substitute "VC2SC2462-C-1" for "VS2SD601AR/-1".

| | | | | |
|---|---|---|---|---|
| Q201 | VS2SC2735//1E | J | 2SC2735 | AC |
| Q301 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q351 | VS2SC2462-C-1 | J | 2SC2462 (14SL30) | AB |
| Q401 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q402 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q403 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q404 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q451 | VS2SB709AR/-1 | J | 2SB709AR | AC |
| Q601 | VS2SC2482//-1 | J | 2SC2482 | AD |
| | or | | | |
| | VS2SC2610/-1E | | | |
| ⚠ Q602 | VS2SD2586//1E | J | 2SD2586 | AM |
| Q752 | VS2SC3198-G-1 | J | 2SC3198(G) | AA |
| Q753 | VS2SC3198-Y-1 | J | 2SC3198(Y) | AA |
| Q951 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q952 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q953 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q961 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q962 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q963 | VS2SD601AR/-1 | J | 2SD601AR (21SL70) | AC |
| Q2001 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q2002 | VS2SD601AR/-1 | J | 2SD601AR | AC |
| Q2060 | VS2SC2462-C-1 | J | 2SC2462(C) | AB |

### DIODES

| | | | | |
|---|---|---|---|---|
| D51 | RH-EX0611GEZZ | J | Zener Diode, 5.1V | AA |
| D52 | RH-EX0676GEZZ | J | Zener Diode, 33V | AA |
| D103 | VHD1SS119//-1 | J | Diode | AB |
| D401 | VHD1SS119//-1 | J | Diode | AB |
| D402 | RH-EX0092CEZZ | J | Zener Diode, 3.9V | AB |
| D454 | RH-EX0103CEZZ | J | Zener Diode, 5.6V | AB |
| D455 | VHD1SS119//-1 | J | Diode | AB |
| D501 | RH-DX0441CEZZ | J | Diode | AC |
| | or | | | |
| | RH-DX0110CEZZ | | | |
| ⚠ D502 | RH-DX0131CEZZ | J | Diode | AC |
| D641 | RH-EX0631GEZZ | J | Zener Diode, 9.1V | AA |
| ▲⚠ D651 | RH-DX0131CEZZ | J | Diode | AC |
| ▲⚠ D652 | VHD1SS119//-1 | J | Diode | AB |
| ▲⚠ D653 | RH-EX0091CEZZ | J | Zener Diode, 22V | AB |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

## PWB-A: DUNTK9882WEV0 (14SL30)
## PWB-A: DUNTK9882WEV2 (21SL70)
## MAIN UNIT (Continued)

| | | | | |
|---|---|---|---|---|
| ⚠ D661 | RH-DX0444CEZZ | J | Diode | AH |
| ⚠ D701 | RH-DX0386CEZZ | J | Diode | AG |
| ⚠ D702 | RH-DX0279CEZZ | J | Diode | AB |
| ⚠ D703 | RH-DX0279CEZZ | J | Diode | AB |
| ⚠ D704 | RH-DX0279CEZZ | J | Diode | AB |
| D705 | RH-DX0492CEZZ | J | Diode | AE |
| D706 | VHD1SS82///1A | J | Diode | AC |
| D707 | VHD1SS82///1A | J | Diode | AC |
| D708 | RH-DX0400CEZZ | J | Diode | AC |
| D709 | RH-DX0164CEZZ | J | Diode | AC |
| D710 | RH-EX0601GEZZ | J | Zener Diode, 3.6V | AA |
| ⚠ D711 | RH-DX0279CEZZ | J | Diode | AB |
| D712 | RH-DX0132CEZZ | J | Diode | AC |
| D751 | VHD1SS119//-1 | J | Diode | AB |
| D752 | RH-DX0406CEZZ | J | Diode | AD |
| D753 | RH-EX0641GEZZ | J | Zener Diode, 12V | AA |
| D754 | RH-DX0445CEZZ | J | Diode | AL |
| D755 | RH-DX0461CEZZ | J | Diode | AG |
| D756 | VHD1SS119//-1 | J | Diode | AB |
| ⚠ D758 | RH-DX0131CEZZ | J | Diode | AC |
| D2001 | VHD1SS119//-1 | J | Diode | AB |
| D2002 | RH-PX0348CEZZ | J | Photodiode | AB |
| D2007 | RH-EX0611GEZZ | J | Zener Diode, 5.1V | AA |
| ⚠ VA701 | RH-VX0048CEZZ | J | Varistor | AE |

### PACKGED CIRCUITS

| | | | | |
|---|---|---|---|---|
| ⚠ PR701 | RMPTP0062CEZZ | J | Packaged Circuit | AH |
| X801 | RCRSB0205CEZZ<br>or<br>RCRSB0001PEZZ | J | Crystal | AF |

### FILTERS

| | | | | |
|---|---|---|---|---|
| CF301 | RFiLC0403CEZZ<br>or<br>RFiLC0029TAZZ | J | Ceramic Filter | AE |
| CF302 | RFiLC0404CEZZ<br>or<br>RFiLC0267CEZZ<br>or<br>RFiLC0007PEZZ | J | Ceramic Filter (21SL70) | AF |
| CF401 | RFiLC0013CEZZ<br>or<br>RFiLC0004PEZZ | J | Ceramic Filter | AE |
| CF631 | RFiLA0034CEZZ | J | Ceramic Filter | AD |
| CF2040 | RFiLC0121GEZZ | J | Ceramic Filter | AD |
| SF201 | RFiLC0405CEZZ | J | SAW Filter | AH |

### COILS

| | | | | |
|---|---|---|---|---|
| L201 | VP-XF1R2K0000 | J | Peaking 1.2µH | AB |
| L202 | RCiLi0612CEZZ<br>or<br>RCiLi0588CEZZ | J | IF Coil | AE |
| L301 | VP-XF8R2K0000 | J | Peaking 8.2µH | AB |
| L302 | RCiLi0613CEZZ<br>or<br>RCiLi0605CEZZ | J | IF Coil | AE |
| L401 | VP-XF6R8K0000 | J | Peaking 6.8µH | AB |
| L402 | VP-XF3R3K0000 | J | Peaking 3.3µH | AB |
| L403 | VP-XF100K0000 | J | Peaking 10µH | AB |
| L404 | VP-XF8R2K0000 | J | Peaking 8.2µH | AB |
| L406 | VP-XF680K0000 | J | Peaking 68µH | AB |
| L409 | VP-XF100K0000 | J | Peaking 10µH | AB |
| L631 | VP-XF120K0000 | J | Peaking 12µH | AB |
| ⚠ L701 | RCiLF0012PEZZ<br>or<br>RCiLF0043PEZZ<br>or<br>RCiLF0019PEZZ | R | Coil (21SL70) | AN |
| ⚠ L702 | RCiLF0012PEZZ<br>or<br>RCiLF0021PEZZ | R | Coil | AN |
| L751 | RCiLP0225CEZZ | J | Coil | AF |
| L2040 | RCiLB0159CEZZ | J | Oscillation Coil | AE |

### TRANSFORMERS

| | | | | |
|---|---|---|---|---|
| ⚠ T601 | RTRNZ0073CEZZ | J | H-Driver (14SL30) | AF |
| ⚠ T601 | RTRNZ0367CEZZ | J | H-Driver (21SL70) | AK |
| ▲⚠ T602 | RTRNF0141PEZZ | R | F.B.T (14SL30) | BC |
| ▲⚠ T602 | RTRNF0147PEZZ | R | F.B.T (21SL70) | BC |
| ⚠ T701 | RTRNZ0138PEZZ | R | Transformer | AW |
| ⚠ T702 | RTRNZ0103GJZZ<br>or<br>RTRNZ0104GJZZ | X | Transformer | |

### CAPACITORS

*[EL.··· Electrolytic, M-Poly.··· Metalized Polypro Film]*

| | | | | | | |
|---|---|---|---|---|---|---|
| C51 | VCEA0A1CW476M | J | 47 | 16V | EL. | AB |
| C52 | VCSATA1CE226K | J | 22 | 16V | Tantalum | AD |
| C53 | VCEA0A1HW105M | J | 1.0 | 50V | EL. | AB |
| C54 | VCEA0A1HW225M | J | 2.2 | 50V | EL. | AB |
| C55 | VCEA0A1CW108M | J | 1000 | 16V | EL. | AD |
| C102 | VCEAGA1CW228M | J | 2200 | 16V | EL. | AE |
| C201 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C202 | VCKYPA1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C203 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C204 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C205 | VCEA0A1HW474M | J | 0.47 | 50V | EL. | AB |
| C206 | VCEA0A1CW227M | J | 220 | 16V | EL. | AC |
| C207 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C208 | VCEA0A1HW474M | J | 0.47 | 50V | EL. | AB |
| C209 | VCKYCY1HB222K | J | 2200p | 50V | Ceramic | AA |
| C210 | VCKYCY1HB102K | J | 1000p | 50V | Ceramic | AA |
| C302 | VCCCCY1HH330J | J | 33p | 50V | Ceramic | AA |
| C303 | VCKYCY1HB472K | J | 4700p (14SL30) | 50V | Ceramic | AA |
| C303 | VCCCCY1HH390J | J | 39p (21SL70) | 50V | Ceramic | AA |
| C304 | VCEA0A1HW225M | J | 2.2 | 50V | EL. (14SL30) | AB |
| C305 | VCKYPA1HB151K | J | 150p | 50V | Ceramic | AA |
| C306 | VCKYPA1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C307 | VCEA0A1CW477M | J | 470 | 16V | EL. | AC |
| C308 | VCKYCY1HB102K | J | 1000p | 50V | Ceramic | AA |
| C309 | VCEA0A1CW227M | J | 220 | 16V | EL. | AC |
| C312 | VCKYCY1EF104Z | J | 0.1 | 25V | Ceramic | AA |
| C351 | VCQYTA1HM823K | J | 0.082 (14SL30) | 50V | Mylar | AB |
| C352 | VCKYCY1HB182K | J | 1800p (14SL30) | 50V | Ceramic | AA |
| C353 | VCEAGA1CW108M | J | 1000 | 16V | EL. (14SL30) | AD |
| C354 | VCEA0A1CW106M | J | 10 | 16V | EL. (14SL30) | AB |
| C355 | VCQYTA1HM104K | J | 0.1 (14SL30) | 50V | Mylar | AC |
| C402 | VCCCCY1HH331J | J | 330p | 50V | Ceramic | AA |
| C403 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C405 | VCEA0A1HW335M | J | 3.3 | 50V | EL. | AB |
| C406 | VCEA0A1HW335M | J | 3.3 | 50V | EL. | AB |
| C408 | VCEA0A1CW106M | J | 10 | 16V | EL. | AB |
| C409 | VCEA0A1HW105M | J | 1.0 | 50V | EL. | AB |
| C410 | VCKYCY1EF104Z | J | 0.1 | 25V | Ceramic | AA |
| C411 | VCEAGA1CW108M | J | 1000 | 16V | EL. | AD |
| C413 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C414 | VCKYCY1EF104Z | J | 0.1 | 25V | Ceramic | AA |
| C419 | VCCCCY1HH330J | J | 33p | 50V | Ceramic | AA |
| C420 | VCCCCY1HH471J | J | 470p | 50V | Ceramic | AA |
| C451 | VCQYTA1HM563K | J | 0.056 | 50V | Mylar | AB |
| C454 | VCEA0A1HW475M | J | 4.7 | 50V | EL. | AB |
| C502 | VCEA0A1EW477M | J | 470 | 25V | EL. | AD |
| C504 | VCKYPA2HB391K | J | 390p | 500V | Ceramic | AA |
| C505 | VCQYTA1HM473K | J | 0.047 | 50V | Mylar | AB |
| C507 | VCQYTA1HM103K | J | 0.01 | 50V | Mylar | AB |
| C508 | VCEAGA1VW107M | J | 100 | 35V | EL. | AC |
| C509 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C510 | VCEAGA1VW477M | J | 470 | 35V | EL. | AD |
| C511 | VCQYTA1HM473K | J | 0.047 | 50V | Mylar | AB |
| C513 | VCEACA1HC225M | J | 2.2 | 50V | EL. | AC |
| C514 | VCEACA1HC335J | J | 3.3 | 50V | EL. (14SL30) | AC |
| C514 | VCEACA1HC225J | J | 2.2 | 50V | EL. (21SL70) | AC |

## PWB-A: DUNTK9882WEV0 (14SL30)
## PWB-A: DUNTK9882WEV2 (21SL70)
## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | Description | | | Code |
|---|---|---|---|---|---|---|
| C517 | VCKYPA1HB102K | J | 1000p | 50V | Ceramic | AA |
| C522 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C551 | VCSATA1CE225K | J | 2.2 | 16V | Tantalum | AB |
| C552 | VCEA0A1HW225M | J | 2.2 | 50V | EL. | AB |
| C603 | VCKYPA2HB222K | J | 2200p (14SL30) | 500V | Ceramic | AA |
| C603 | VCKYPA2HB562K | J | 5600p (21SL70) | 500V | Ceramic | AC |
| ⚠ C604 | VCEAGH2CW227M | J | 220 | 160V | EL. | AH |
| ▲⚠ C608 | VCFPPD3CA682H | J | 6800p (14SL30) | 1.6kV | M-Poly. | AE |
| ▲⚠ C608 | VCFPPD3CA842H | J | 8400p (21SL70) | 1.6kV | M-Poly. | AE |
| C609 | VCKYPA2HB102K | J | 1000p (14SL30) | 500V | Ceramic | AA |
| C609 | VCKYPA2HB222K | J | 2200p (21SL70) | 500V | Ceramic | AA |
| C612 | VCFPPJ2EB474J | J | 0.47 (14SL30) | 250V | M-Poly. | AF |
| C612 | VCFPPJ2EB564J | J | 0.56 (21SL70) | 250V | M-Poly. | AF |
| C631 | VCEA0A1HW225M | J | 2.2 | 50V | EL. | AB |
| C632 | VCKYCY1HF103Z | J | 0.01 | 50V | Ceramic | AA |
| C634 | VCEA0A1CW477M | J | 470 | 16V | EL. | AC |
| C652 | VCEA0A1HW475M | J | 4.7 | 50V | EL. | AB |
| C653 | VCEA0A1CW106M | J | 10 | 16V | EL. | AB |
| C661 | VCKYPA2HB152K | J | 1500p | 500V | Ceramic | AA |
| C662 | VCEA0A1CW477M | J | 470 | 16V | EL. | AC |
| ⚠ C701 | RC-FZ027SCEZZ or RC-FZ015SCEZZ or RC-FZ0168CEZZ or RC-FZ010SCEZZ or RC-FZ002SCEZZ or RC-FZ027CUMZZ or RC-FZ059SCEZZ | J | 0.047 | AC250V | Plastic | AD |
| C702 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C703 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C704 | VCEA0A2GW475M | J | 4.7 | 400V | EL. | AE |
| C705 | RC-QZA104TAYK | J | 0.1 | 50V | Mylar | AB |
| ⚠ C707 | RC-EZ0804CEZZ | J | 220 | 400V | EL. | AU |
| C708 | RC-KZ1022CEZZ | J | 47p | 1kV | Ceramic | AC |
| C709 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C710 | RC-QZA471TAYJ | J | 470p | 50V | Mylar | AB |
| C711 | RC-KZ0339CEZZ | J | 680p | 2kV | Ceramic | AD |
| C712 | RC-QZA102TAYJ | J | 1000p | 50V | Mylar | AB |
| C713 | RC-KZ007JCEZZ | J | 0.01 | 250V | Ceramic | AC |
| C714 | RC-KZ0338CEZZ | J | 560p | 2kV | Ceramic | AD |
| C715 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C716 | VCEAGA1EW107M | J | 100 | 25V | EL. | AD |
| C717 | RC-QZA182TAYJ | J | 1800p | 50V | Mylar | AB |
| C718 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C719 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C720 | RC-KZ0160GEZZ or RC-KZ0029CEZZ | J | 0.01 | 250V | Ceramic | AC |
| C721 | VCKYPA2HB821K | J | 820p | 500V | Ceramic | AA |

| Ref. No. | Part No. | ★ | Description | | | Code |
|---|---|---|---|---|---|---|
| ⚠ C730 | RC-KZ0155CEZZ or RC-KZ0156CEZZ | J | 680p 3300p | 4kV 4kV | Ceramic | AE |
| C751 | VCEA0A1CW107M | J | 100 | 16V | EL. | AC |
| C752 | VCEA0A1CW108M | J | 1000 | 16V | EL. | AD |
| C754 | VCEAGA1EW108M | J | 1000 | 25V | EL. | AD |
| C755 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C756 | VCKYD41HB102K | J | 1000p | 50V | Ceramic | AA |
| ⚠ C757 | VCEA4W2CN227M | J | 220 | 160V | EL. | AG |
| C758 | VCEAGA2EW106M | J | 10 | 250V | EL. | AC |
| C759 | VCKYPA2HB102K | J | 1000p | 500V | Ceramic | AA |
| C760 | VCEA0A1CW337M | J | 330 | 16V | EL. | AC |
| C761 | VCQYTA1HM104K | J | 0.1 | 50V | Mylar | AC |
| C762 | RC-KZ0339CEZZ | J | 680p | 2kV | Ceramic | AD |
| C763 | RC-QZA473TAYJ | J | 0.047 | 50V | Mylar | AB |
| C766 | VCEA0A1CW476M | J | 47 | 16V | EL. | AB |
| C767 | VCEA0A1CW107M | J | 100 | 16V | EL. | AC |
| C801 | RC-QZA223TAYK | J | 0.022 | 50V | Mylar | AB |
| C802 | VCEA0A1HW474M | J | 0.47 | 50V | EL. | AB |
| C803 | VCCCCY1HH120J | J | 12p | 50V | Ceramic | AA |
| C804 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C805 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C806 | VCEA0A1HW104M | J | 0.1 | 50V | EL. | AB |
| C807 | VCCCCY1HH820J | J | 82p | 50V | Ceramic | AA |
| C901 | VCKYCY1EF104Z | J | 0.1 | 25V | Ceramic | AA |
| C904 | VCEA0A1HW335M | J | 3.3 | 50V | EL. (21SL70) | AB |
| C905 | VCEA0A1HW335M | J | 3.3 | 50V | EL. | AA |
| C950 | VCEAGA1CW108M | J | 1000 | 16V | EL. (21SL70) | AD |
| C951 | VCEA0A1HW335M | J | 3.3 | 50V | EL. (21SL70) | AB |
| C952 | VCCCCY1HH681J | J | 680p (21SL70) | 50V | Ceramic | AB |
| C953 | VCEA0A1HW335M | J | 3.3 | 50V | EL. (21SL70) | AB |
| C954 | VCQYTA1HM183K | J | 0.018 (21SL70) | 50V | Mylar | AB |
| C960 | VCEA0A1CW227M | J | 220 | 16V | EL. (21SL70) | AC |
| C961 | VCEA0A1HW335M | J | 3.3 | 50V | EL. (21SL70) | AB |
| C962 | VCCCCY1HH681J | J | 680p (21SL70) | 50V | Ceramic | AB |
| C963 | VCEA0A1HW335M | J | 3.3 | 50V | EL. (21SL70) | AB |
| C964 | VCQYTA1HM183K | J | 0.018 (21SL70) | 50V | Mylar | AB |
| C2001 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2002 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2021 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2022 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2023 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2024 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C2040 | VCEA0A1AW107M | J | 100 | 10V | EL. | AB |
| C2041 | VCEA0A1HW105M | J | 1.0 | 50V | EL. | AB |
| C2060 | VCQYTA1HM104K | J | 0.1 | 50V | Mylar | AC |
| C2061 | VCCCPA1HH101J | J | 100p | 50V | Ceramic | AA |
| C2062 | VCEA0A1AW107M | J | 100 | 10V | EL. | AB |
| C2401 | VCCCPA1HH560J | J | 56p | 50V | Ceramic | AA |
| C2402 | VCCCPA1HH560J | J | 56p | 50V | Ceramic | AA |
| C2601 | VCEA0A1CW476M | J | 47 | 16V | EL. | AB |
| C2602 | VCCCCY1HH101J | J | 100p | 50V | Ceramic | AA |
| C3001 | VCE9GA1HW475M | J | 4.7 (21SL70) | 50V | EL.(N.P) | AB |
| C3002 | VCKYCY1HB562K | J | 5600p (21SL70) | 50V | Ceramic | AA |
| C3003 | RC-QZA123TAYK | J | 0.012 (21SL70) | 50V | Mylar | AB |
| C3004 | VCEA0A1HW105M | J | 1.0 | 50V | EL. (21SL70) | AB |
| C3005 | VCEA0A1HW475M | J | 4.7 | 50V | EL. (21SL70) | AB |
| C3006 | VCEA0A1HW106M | J | 10 | 50V | EL. (21SL70) | AB |
| C3007 | VCEA0A1HW475M | J | 4.7 | 50V | EL. (21SL70) | AB |
| C3008 | VCKYCY1HF103Z | J | 0.01 (21SL70) | 50V | Ceramic | AA |
| C3009 | VCEA0A1CW227M | J | 220 | 16V | EL. (21SL70) | AC |
| C3010 | VCE9GA1HW475M | J | 4.7 (21SL70) | 50V | EL.(N.P) | AB |
| C3011 | VCEA0A1HW475M | J | 4.7 | 50V | EL. (21SL70) | AB |
| C3012 | VCE9GA1HW475M | J | 4.7 (21SL70) | 50V | EL.(N.P) | AB |
| C3013 | VCKYCY1HB272K | J | 2700p (21SL70) | 50V | Ceramic | AA |

# PWB-A: DUNTK9882WEV0 (14SL30)
# PWB-A: DUNTK9882WEV2 (21SL70)
# MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| C3014 | RC-QZA473TAYK | J | 0.047 50V Mylar (21SL70) | AB |
| C3015 | VCSATA1CE335K | J | 3.3 16V Tantalum (21SL70) | AC |
| C3016 | VCE9GA1HW475M | J | 4.7 50V EL.(N.P) (21SL70) | AB |
| C3017 | VCSATA1CE106K | J | 10 16V Tantalum (21SL70) | AD |
| C3018 | VCEA0A1HW105M | J | 1.0 50V EL. (21SL70) | AB |
| C3019 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3020 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3021 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3022 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3023 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3024 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3025 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3026 | VCKYCY1HF103Z | J | 0.01 50V Ceramic (21SL70) | AA |
| C3027 | VCEAGA1HW225M | J | 2.2 50V EL. (21SL70) | AB |
| C3028 | VCEAGA1HW225M | J | 2.2 50V EL. (21SL70) | AB |
| C5301 | VCEAGA1VW108M | J | 1000 35V EL. (21SL70) | AD |
| C5304 | VCEAGA1HW225M | J | 2.2 50V EL. (21SL70) | AB |
| C5305 | VCEAGA1CW226M | J | 22 16V EL. (21SL70) | AB |
| C5306 | RC-QZA272TAYK | J | 2700p 50V Mylar (21SL70) | AB |
| C5307 | RC-QZA272TAYK | J | 2700p 50V Mylar (21SL70) | AB |
| C5308 | VCEAGA1VW107M | J | 100 35V EL. (21SL70) | AC |
| C5309 | VCEAGA1EW108M | J | 1000 25V EL. (21SL70) | AD |
| C5310 | VCEAGA1EW108M | J | 1000 25V EL. (21SL70) | AD |

## RESISTORS

*[M-Ox.··· Metal Oxide, M-Film ··· Metal Film]*

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| RJ1 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ2 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ3 | VRS-CY1JF000J | J | 0 1/16W M-Ox. (14SL30) | AA |
| RJ7 | VRS-CY1JF000J | J | 0 1/16W M-Ox. (21SL70) | AA |
| RJ8 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ10 | VRS-CY1JF000J | J | 0 1/16W M-Ox. (14SL30) | AA |
| RJ11 | VRS-CY1JF000J | J | 0 1/16W M-Ox. (14SL30) | AA |
| RJ12 | VRS-CY1JF000J | J | 0 1/16W M-Ox. (14SL30) | AA |
| RJ13 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ14 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ17 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ18 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ19 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| RJ20 | VRS-CY1JF000J | J | 0 1/16W M-Ox. | AA |
| ⚠ R51 | VRS-VV3DB151J | J | 150 2W M-Ox. | AA |
| R52 | VRD-RA2BE1R0J | J | 1.0 1/8W Carbon | AA |
| ⚠ R53 | VRS-VV3LB223J | J | 22k 3W M-Ox. | AB |
| R54 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R55 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R56 | VRS-CY1JF823J | J | 82k 1/16W M-Ox. | AA |
| R57 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R201 | VRS-CY1JF221J | J | 220 1/16W M-Ox. | AA |
| R202 | VRS-CY1JF122J | J | 1.2k 1/16W M-Ox. | AA |
| R203 | VRS-CY1JF682J | J | 6.8k 1/16W M-Ox. | AA |
| R204 | VRS-CY1JF270J | J | 27 1/16W M-Ox. | AA |
| R205 | VRS-CY1JF391J | J | 390 1/16W M-Ox. | AA |
| R206 | VRD-RA2EE151J | J | 150 1/4W Carbon | AA |
| R208 | VRS-CY1JF391J | J | 390 1/16W M-Ox. | AA |
| R301 | VRD-RA2BE222J | J | 2.2k 1/8W Carbon | AA |
| R302 | VRS-CY1JF102J | J | 1.0k 1/16W M-Ox. | AA |
| R303 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R304 | VRS-CY1JF333J | J | 33k 1/16W M-Ox. (21SL70) | AA |
| R305 | VRS-CY1JF102J | J | 1.0k 1/16W M-Ox. (21SL70) | AA |
| R306 | VRS-CY1JF152J | J | 1.5k 1/16W M-Ox. (21SL70) | AA |
| R351 | VRD-RA2BE223J | J | 22k 1/8W Carbon (14SL30) | AA |
| R352 | VRD-RA2BE4R7J | J | 4.7 1/8W Carbon (14SL30) | AA |
| R355 | VRD-RA2BE333J | J | 33k 1/8W Carbon (14SL30) | AA |
| R355 | VRD-RA2BE101J | J | 100 1/8W Carbon (21SL70) | AB |
| R401 | VRS-CY1JF682J | J | 6.8k 1/16W M-Ox. | AA |
| R403 | VRS-CY1JF331J | J | 330 1/16W M-Ox. | AA |
| R404 | VRS-CY1JF391J | J | 390 1/16W M-Ox. | AA |
| R405 | VRD-RA2BE102J | J | 1.0k 1/8W Carbon | AA |
| R406 | VRS-CY1JF470J | J | 47 1/16W M-Ox. | AA |
| R407 | VRS-CY1JF680J | J | 68 1/16W M-Ox. | AA |
| R408 | VRS-CY1JF102J | J | 1.0k 1/16W M-Ox. | AA |
| R409 | VRS-CY1JF471J | J | 470 1/16W M-Ox. | AA |
| R410 | VRD-RA2BE563J | J | 56k 1/8W Carbon | AA |
| R411 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R412 | VRD-RA2EE561J | J | 560 1/4W Carbon | AA |
| R413 | VRD-RA2BE470J | J | 47 1/8W Carbon | AA |
| R414 | VRD-RA2BE470J | J | 47 1/8W Carbon | AA |
| R415 | VRD-RA2BE470J | J | 47 1/8W Carbon | AA |
| R416 | VRS-CY1JF102J | J | 1.0k 1/16W M-Ox. | AA |
| R417 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R418 | VRS-CY1JF152J | J | 1.5k 1/16W M-Ox. | AA |
| R419 | VRS-CY1JF472J | J | 4.7k 1/16W M-Ox. | AA |
| R423 | VRS-CY1JF222J | J | 2.2k 1/16W M-Ox. | AA |
| R426 | VRS-CY1JF271J | J | 270 1/16W M-Ox. | AA |
| R440 | VRS-CY1JF821J | J | 820 1/16W M-Ox. | AA |
| ⚠ R451 | VRS-VV3AB103J | J | 10k 1W M-Ox. | AA |
| R452 | VRD-RA2BE152J | J | 1.5k 1/8W Carbon | AA |
| R454 | VRD-RA2BE334J | J | 330k 1/8W Carbon | AA |
| R455 | VRD-RA2BE392J | J | 3.9k 1/8W Carbon | AA |
| R456 | VRS-CY1JF223J | J | 22k 1/16W M-Ox. | AA |
| R457 | VRD-RA2BE102J | J | 1.0k 1/8W Carbon | AA |
| R458 | VRD-RA2BE564J | J | 560k 1/8W Carbon (14SL30) | AA |
| R458 | VRD-RA2BE334J | J | 330k 1/8W Carbon (21SL70) | AA |
| R459 | VRD-RA2BE123J | J | 12k 1/8W Carbon | AA |
| R504 | VRD-RA2BE471J | J | 470 1/8W Carbon | AA |
| R505 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R506 | VRD-RA2BE683G | J | 68k 1/8W Carbon | AA |
| R507 | VRD-RA2BE104G | J | 100k 1/8W Carbon | AA |
| R508 | VRD-RA2BE473J | J | 47k 1/8W Carbon | AA |
| R510 | VRD-RM2HD1R5J | J | 1.5 1/2W Carbon (14SL30) | AA |
| R510 | VRD-RM2HD1R2J | J | 1.2 1/2W Carbon (21SL70) | AA |
| ⚠ R511 | VRN-VV3AB3R9J | J | 3.9 1W M-Film (14SL30) | AA |
| ⚠ R511 | VRN-VV3AB1R5J | J | 1.5 1W M-Film (21SL70) | AA |
| R512 | VRD-RM2HD271J | J | 270 1/2W Carbon (14SL30) | AA |
| R512 | VRD-RM2HD331J | J | 330 1/2W Carbon (21SL70) | AA |
| R516 | VRD-RA2BE153G | J | 15k 1/8W Carbon (14SL30) | AA |
| R516 | VRD-RA2BE683G | J | 68k 1/8W Carbon (21SL70) | AA |
| R517 | VRD-RA2BE123G | J | 12k 1/8W Carbon (14SL30) | AA |
| R517 | VRD-RA2BE103G | J | 10k 1/8W Carbon (21SL70) | AA |
| R518 | VRD-RA2BE154J | J | 150k 1/8W Carbon | AA |

## PWB-A: DUNTK9882WEV0 (14SL30)
## PWB-A: DUNTK9882WEV2 (21SL70)
## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | Description | | | Code |
|---|---|---|---|---|---|---|
| R524 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R525 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| R552 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R553 | VRS-CY1JF273J | J | 27k | 1/16W | M-Ox. | AA |
| R554 | VRS-CY1JF472J | J | 4.7k | 1/16W | M-Ox. | AA |
| R602 | VRD-RM2HD392J | J | 3.9k | 1/2W | Carbon (14SL30) | AA |
| R602 | VRD-RM2HD472J | J | 4.7k | 1/2W | Carbon (21SL70) | AA |
| ⚠ R603 | VRS-SV3LB182J | J | 1.8k | 3W | M-Ox. | AB |
| R608 | VRD-RA2BE471J | J | 470 | 1/8W | Carbon | AA |
| R609 | VRD-RA2BE331J | J | 330 | 1/8W | Carbon | AA |
| ⚠ R610 | VRS-VV3DB391J | J | 390 | 2W | M-Ox. | AA |
| R620 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| R621 | VRS-CY1JF682J | J | 6.8k | 1/16W | M-Ox. | AA |
| R631 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R632 | VRD-RA2BE152J | J | 1.5k | 1/8W | Carbon | AA |
| R633 | VRD-RA2BE472J | J | 4.7k | 1/8W | Carbon | AA |
| ⚠ R641 | VRS-VV3AB682J | J | 6.8k | 1W | M-Ox. | AA |
| R642 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon (14SL30) | AA |
| R642 | VRD-RA2BE821J | J | 820 | 1/8W | Carbon (21SL70) | AA |
| ▲⚠ R651 | VRD-RM2HD1R0J | J | 1.0 | 1/2W | Carbon | AA |
| ▲⚠ R653 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| ▲⚠ R654 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| ▲⚠ R655 | VRS-CY1JF104J | J | 100k | 1/16W | M-Ox. | AA |
| ⚠ R659 | VRN-VV3AB1R8J | J | 1.8 | 1W | M-Film (14SL30) | AA |
| ⚠ R659 | VRN-VV3ABR33J | J | 0.33 | 1W | M-Film (21SL70) | AA |
| ⚠ R661 | VRN-VV3ABR47J | J | 0.47 | 1W | M-Film | AA |
| ⚠ R701 | VRW-KQ41C3R3K | J | 3.3 | 15W | Cement | AG |
| ⚠ R702 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| ⚠ R703 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| ⚠ R704 | VRW-KP3HC100J | J | 10 | 5W | Cement | AD |
| R705 | VRD-RA2BE122J | J | 1.2k | 1/8W | Carbon | AA |
| R706 | VRD-RM2HD152J | J | 1.5k | 1/2W | Carbon | AA |
| ⚠ R707 | VRS-KT3LB473J | J | 47k | 3W | M-Ox. | AE |
| R708 | VRD-RA2BE272J | J | 2.7k | 1/8W | Carbon | AA |
| R709 | VRD-RA2BE681J | J | 680 | 1/8W | Carbon | AA |
| ⚠ R710 | VRN-VV3ABR39J | J | 0.39 | 1W | M-Film | AA |
| ⚠ R711 | VRN-VV3ABR33J | J | 0.33 | 1W | M-Film | AA |
| R712 | VRD-RM2HD150J | J | 15 | 1/2W | Carbon | AA |
| R714 | VRD-RM2HD104J | J | 100k | 1/2W | Carbon | AA |
| R715 | VRD-RM2HD104J | J | 100k | 1/2W | Carbon | AA |
| R717 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| R718 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| R722 | VRD-RM2HD124J | J | 120k | 1/2W | Carbon | AA |
| ⚠ R725 | VRC-UA2HG825K | J | 8.2M | 1/2W | Solid | AA |
| ⚠ R726 | VRC-UA2HG825K | J | 8.2M | 1/2W | Solid | AA |
| R751 | VRD-RA2BE104J | J | 100k | 1/8W | Carbon | AA |
| R752 | VRD-RA2BE473J | J | 47k | 1/8W | Carbon | AA |
| ⚠ R753 | VRS-KA3HG3R3K | J | 3.3 | 5W | M-Ox. | AD |
| R754 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon (14SL30) | AB |
| R754 | VRD-RA2BE392J | J | 3.9k | 1/8W | Carbon (21SL70) | AA |
| ⚠ R755 | VRS-VV3DB470J | J | 47 | 2W | M-Ox. | AA |
| R756 | VRD-RA2BE562J | J | 5.6k | 1/8W | Carbon | AA |
| R757 | VRN-VV3DB1R8J | J | 1.8 | 2W | M-Film (14SL30) | AB |
| ⚠ R758 | VRS-SV2HC180J | J | 18 | 1/2W | M-Ox. | AA |
| R759 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R760 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R801 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R802 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. | AA |
| R803 | VRS-CY1JF182J | J | 1.8k | 1/16W | M-Ox. (14SL30) | AA |
| R803 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. (21SL70) | AA |
| R804 | VRS-CY1JF182J | J | 1.8k | 1/16W | M-Ox. (14SL30) | AA |
| R804 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. (21SL70) | AA |
| R805 | VRS-CY1JF182J | J | 1.8k | 1/16W | M-Ox. (14SL30) | AA |
| R805 | VRS-CY1JF222J | J | 2.2k | 1/16W | M-Ox. (21SL70) | AA |
| R806 | VRS-CY1JF333J | J | 33k | 1/16W | M-Ox. | AA |
| R902 | VRS-CY1JF750J | J | 75 | 1/16W | M-Ox. | AA |
| R905 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R906 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R924 | VRS-CY1JF104J | J | 100k | 1/16W | M-Ox. (21SL70) | AA |
| R925 | VRS-CY1JF104J | J | 100k | 1/16W | M-Ox. | AA |
| R950 | VRD-RA2BE331J | J | 330 | 1/8W | Carbon (21SL70) | AA |
| R951 | VRS-CY1JF683J | J | 68k | 1/16W | M-Ox. (21SL70) | AA |
| R952 | VRS-CY1JF223J | J | 22k | 1/16W | M-Ox. (21SL70) | AA |
| R953 | VRS-CY1JF392J | J | 3.9k | 1/16W | M-Ox. (21SL70) | AA |
| R954 | VRS-CY1JF182J | J | 1.8k | 1/16W | M-Ox. (21SL70) | AA |
| R955 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R956 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R957 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. (21SL70) | AA |
| R958 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R960 | VRS-CY1JF683J | J | 68k | 1/16W | M-Ox. (21SL70) | AA |
| R961 | VRS-CY1JF683J | J | 68k | 1/16W | M-Ox. (21SL70) | AA |
| R962 | VRS-CY1JF223J | J | 22k | 1/16W | M-Ox. (21SL70) | AA |
| R963 | VRS-CY1JF392J | J | 3.9k | 1/16W | M-Ox. (21SL70) | AA |
| R964 | VRS-CY1JF182J | J | 1.8k | 1/16W | M-Ox. (21SL70) | AA |
| R965 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R966 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R967 | VRS-CY1JF332J | J | 3.3k | 1/16W | M-Ox. (21SL70) | AA |
| R968 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. (21SL70) | AA |
| R971 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R972 | VRD-RA2BE101J | J | 100 | 1/8W | Carbon | AB |
| R2001 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. (14SL30) | AA |
| R2002 | VRS-CY1JF103J | J | 10k | 1/16W | M-Ox. | AA |
| R2003 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2004 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2005 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2006 | VRS-CY1JF101J | J | 100 | 1/16W | M-Ox. | AA |
| R2007 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon (21SL70) | AA |
| R2008 | VRD-RA2BE224J | J | 220k | 1/8W | Carbon | AA |
| R2009 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2010 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2012 | VRS-CY1JF391J | J | 390 | 1/16W | M-Ox. | AA |
| R2020 | VRD-RM2HD223J | J | 22k | 1/2W | Carbon | AA |
| R2022 | VRD-RA2BE333J | J | 33k | 1/8W | Carbon | AA |
| R2024 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2025 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2026 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2027 | VRD-RA2BE682J | J | 6.8k | 1/8W | Carbon | AA |
| R2028 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R2029 | VRS-CY1JF102J | J | 1.0k | 1/16W | M-Ox. | AA |
| R2031 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |

## PWB-A: DUNTK9882WEV0 (14SL30)
## PWB-A: DUNTK9882WEV2 (21SL70)
## MAIN UNIT (Continued)

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| R2032 | VRD-RA2BE471J | J | 470 1/8W Carbon | AA |
| R2033 | VRS-CY1JF223J | J | 22k 1/16W M-Ox. | AA |
| R2040 | VRS-CY1JF102J | J | 1.0k 1/16W M-Ox. | AA |
| R2041 | VRD-RA2BE333J | J | 33k 1/8W Carbon | AA |
| R2042 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R2043 | VRD-RA2BE101J | J | 100 1/8W Carbon | AB |
| R2044 | VRS-CY1JF682J | J | 6.8k 1/16W M-Ox. | AA |
| R2045 | VRS-CY1JF101J | J | 100 1/16W M-Ox. | AA |
| R2047 | VRS-CY1JF221J | J | 220 1/16W M-Ox. | AA |
| R2048 | VRS-CY1JF562J | J | 5.6k 1/16W M-Ox. | AA |
| R2049 | VRS-CY1JF333J | J | 33k 1/16W M-Ox. | AA |
| R2054 | VRS-CY1JF222J | J | 2.2k 1/16W M-Ox. | AA |
| R2055 | VRD-RA2BE103J | J | 10k 1/8W Carbon | AA |
| R2060 | VRD-RA2BE221J | J | 220 1/8W Carbon | AA |
| R2061 | VRS-CY1JF562J | J | 5.6k 1/16W M-Ox. | AA |
| R2062 | VRS-CY1JF183J | J | 18k 1/16W M-Ox. | AA |
| R2063 | VRD-RA2BE222J | J | 2.2k 1/8W Carbon | AA |
| R2064 | VRD-RA2BE332J | J | 3.3k 1/8W Carbon | AA |
| R2066 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R2067 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R2068 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R2070 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. | AA |
| R2101 | VRS-CY1JF101J | J | 100 1/16W M-Ox. | AA |
| R2102 | VRS-CY1JF101J | J | 100 1/16W M-Ox. | AA |
| R2201 | VRD-RA2EE331J | J | 330 1/4W Carbon | AA |
| R2501 | VRS-CY1JF123J | J | 12k 1/16W M-Ox. | AA |
| R2503 | VRS-CY1JF273J | J | 27k 1/16W M-Ox. | AA |
| R2504 | VRS-CY1JF123J | J | 12k 1/16W M-Ox. | AA |
| R2505 | VRS-CY1JF563J | J | 56k 1/16W M-Ox. | AA |
| R2506 | VRS-CY1JF563J | J | 56k 1/16W M-Ox. | AA |
| R2507 | VRS-CY1JF823J | J | 82k 1/16W M-Ox. | AA |
| R2508 | VRS-CY1JF153J | J | 15k 1/16W M-Ox. | AA |
| R2509 | VRS-CY1JF272J | J | 2.7k 1/16W M-Ox. | AA |
| R2601 | VRD-RA2BE470J | J | 47 1/8W Carbon | AA |
| R3001 | VRD-RA2BE221J | J | 220 1/8W Carbon (21SL70) | AA |
| R3002 | VRD-RA2BE221J | J | 220 1/8W Carbon (21SL70) | AA |
| R3003 | VRS-CY1JF105J | J | 1.0M 1/16W M-Ox. (21SL70) | AA |
| R3004 | VRS-CY1JF104J | J | 100k 1/16W M-Ox. (21SL70) | AA |
| R3005 | VRS-CY1JF623J | J | 62k 1/16W M-Ox. (21SL70) | AA |
| R3007 | VRS-CY1JF332J | J | 3.3k 1/16W M-Ox. (21SL70) | AA |
| R3008 | VRS-CY1JF302J | J | 3.0k 1/16W M-Ox. (21SL70) | AA |
| R3010 | VRS-CY1JF392J | J | 3.9k 1/16W M-Ox. (21SL70) | AA |
| R3011 | VRD-RA2BE102J | J | 1.0k 1/8W Carbon (21SL70) | AA |
| R3012 | VRD-RA2BE102J | J | 1.0k 1/8W Carbon (21SL70) | AA |
| R5302 | VRD-RA2BE123J | J | 12k 1/8W Carbon (21SL70) | AA |
| R5303 | VRS-CY1JF223J | J | 22k 1/16W M-Ox. (21SL70) | AA |
| R5304 | VRD-RA2BE103J | J | 10k 1/8W Carbon (21SL70) | AA |
| R5305 | VRS-CY1JF103J | J | 10k 1/16W M-Ox. (21SL70) | AA |
| R5306 | VRS-CY1JF223J | J | 22k 1/16W M-Ox. (21SL70) | AA |
| R5307 | VRD-RA2BE102J | J | 1.0k 1/8W Carbon (21SL70) | AA |

### SWITCHES

| | | | | |
|---|---|---|---|---|
| S2501 | QSW-K0079GEZZ | J | Power | AB |
| S2502 | QSW-K0079GEZZ | J | Vol-Down | AB |
| S2503 | QSW-K0079GEZZ | J | Vol-Up | AB |
| S2504 | QSW-K0079GEZZ | J | Ch-Down | AB |
| S2505 | QSW-K0079GEZZ | J | Ch-Up | AB |
| S2506 | QSW-K0079GEZZ | J | Menu | AB |

### MISCELLANEOUS PARTS

| | | | | |
|---|---|---|---|---|
| ⚠ RY751 | RRLYU0045CEZZ | J | Relay | |
| ⚠ F701 | QFS-C3229CEZZ | J | Fuse, 3.15A (125V) | AD |
| FB602 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB603 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB701 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB702 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB703 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| ⚠ FB704 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB751 | RBLN-0037CEZZ | J | Ferrite Bead (14SL30) | AB |
| FB752 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FB753 | RBLN-0037CEZZ | J | Ferrite Bead (21SL70) | AB |
| FB754 | RBLN-0037CEZZ | J | Ferrite Bead | AB |
| FH701 | QFSHD1013CEZZ | J | Fuse Holder | AC |
| FH702 | QFSHD1014CEZZ | J | Fuse Holder | AC |
| P302 | QPLGN0461CEZZ | J | Plug, 4-pin (S) (14SL30) | AB |
| P401 | QPLGN0561CEZZ | J | Plug, 5-pin (GBN) | AB |
| P601 | QPLGN0603CEZZ | J | Plug, 6-pin (K) | AB |
| P651 | QPLGN0361CEZZ | J | Plug, 3-pin | AB |
| P701 | QPLGN0269GEZZ | J | Plug, 2-pin (P) | AB |
| P702 | QPLGN0207CEZZ | J | Plug, 2-pin (M) | AA |
| P751 | QPLGN0461CEZZ | J | Plug, 4-pin (YBN) | AB |
| P998 | QPLGN0461CEZZ | J | Plug, 4-pin (E) (14SL30) | AB |
| P998 | QPLGN0661CEZZ | J | Plug, 6-pin (E) (21SL70) | AD |
| P999 | QPLGN0661CEZZ | J | Plug, 6-pin (D) (21SL70) | AD |
| P2001 | QPLGN0561CEZZ | J | Plug, 5-pin | AB |
| P5301 | QPLGN0461CEZZ | J | Plug, 4-pin (S) (21SL70) | AB |
| RMC2601 | RRMCU0222CEZZ or RRMCU0216CEZZ | J | R/C Receiver | AL |
| RDA351 | PRDAR0102GJFW | X | Heat Sink, for IC351 (14SL30) | |
| RDA501 | PRDAR0103GJFW | X | Heat Sink, for IC501 | AN |
| RDA602 | PRDAR0216PEFW | R | Heat Sink, for Q602 (21SL70) | AE |
| RDA701 | PRDAR0260PEFW | R | Heat Sink, for IC701 | AH |
| RDA754 | PRDAR0160PEFW | R | Heat Sink, for D754 (21SL70) | AF |
| RDA5301 | PRDAR0258PEFW | R | Heat Sink, for IC5301 (21SL70) | AG |
| TAN901 | QTANJ0523CEZZ | J | Terminal (21SL70) | |
| | LHLDP1042PE00 | R | Holder | AG |
| | LHLDW1002PEZZ | R | Holder | AB |
| | LX-BZ0086TAFD | J | Screw | AA |
| | LX-BZ3100CEFD | J | Screw | AA |
| | LX-TZ3004CEFD | J | Screw | AA |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

## PWB-A: DUNTK9432WEV2 (14SL30)
## PWB-A: DUNTK9432WEV6 (21SL40/70)
## CRT UNIT

### TRANSISTORS

| | | | | |
|---|---|---|---|---|
| Q852 | VS2SC2229O/1E | J | 2SC2229O | AD |
| Q854 | VS2SC2229O/1E | J | 2SC2229O | AD |
| Q856 | VS2SC2229O/1E | J | 2SC2229O | AD |
| Q881 | VS2SA1266-Y-1<br>or<br>VS2SA1015-Y-1 | J | 2SA1266(Y) | AA |

### DIODES

You can substitute "RH-DX0045GEZZ" and "VHD-DX0446CEZZ" for "VHD1SS119//-1".

| | | | | |
|---|---|---|---|---|
| D881 | VHD1SS119//-1 | J | Diode | AB |
| D882 | VHD1SS119//-1 | J | Diode | AB |
| D885 | VHD1SS119//-1 | J | Diode | AB |

### COIL

| | | | | |
|---|---|---|---|---|
| L851 | VP-DF151K0000 | J | Peaking 150µH | AB |

### CAPACITORS

*[EL.··· Electrolytic]*

| | | | | | | |
|---|---|---|---|---|---|---|
| C851 | VCKYPA1HB271K | J | 270p | 50V | Ceramic | AA |
| C852 | VCKYPA1HB271K | J | 270p | 50V | Ceramic | AA |
| C853 | VCKYPA1HB271K | J | 270p | 50V | Ceramic | AA |
| C854 | RC-KZ0016CEZZ | J | 0.01 | 1.4kV | Ceramic | AC |
| C881 | VCEA0A1CW106M | J | 10 | 16V | EL. | AB |
| C883 | VCEA0A1CW336M | J | 33 | 16V | EL. | AB |

### RESISTORS

*[M-Ox.··· Metal Oxide]*

| | | | | | | |
|---|---|---|---|---|---|---|
| R851 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| | | | (21SL40/70) | | | |
| R852 | VRD-RA2BE271J | J | 270 | 1/8W | Carbon | AA |
| | | | (14SL30) | | | |
| R852 | VRD-RA2BE221J | J | 220 | /8W | Carbon | AA |
| | | | (21SL40/70) | | | |
| R853 | VRD-RA2BE121J | J | 120 | 1/8W | Carbon | AA |
| R854 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| | | | (14SL30) | | | |
| R855 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| | | | (14SL30) | | | |
| ⚠ R857 | VRS-VV3AB123J | J | 12k | 1W | M-Ox. | AA |
| R858 | VRD-RM2HD332J | J | 3.3k | 1/2W | Carbon | AA |
| R859 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| R860 | VRD-RA2BE271J | J | 270 | 1/8W | Carbon | AA |
| | | | (14SL30) | | | |
| R860 | VRD-RA2BE221J | J | 220 | 1/8W | Carbon | AA |
| | | | (21SL40/70) | | | |
| R861 | VRD-RA2BE121J | J | 120 | 1/8W | Carbon | AA |
| ⚠ R865 | VRS-VV3AB123J | J | 12k | 1W | M-Ox. | AA |
| R866 | VRD-RM2HD332J | J | 3.3k | 1/2W | Carbon | AA |
| R867 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |
| | | | (21SL40/70) | | | |
| R868 | VRD-RA2BE271M | J | 270 | 1/8W | Carbon | AA |
| | | | (14SL30) | | | |
| R868 | VRD-RA2BE221J | J | 220 | 1/8W | Carbon | AA |
| | | | (21SL40/70) | | | |
| R869 | VRD-RA2BE121M | J | 120 | 1/8W | Carbon | AA |
| ⚠ R873 | VRS-VV3AB123M | J | 12k | 1W | M-Ox. | AA |
| R874 | VRD-RM2HD332M | J | 3.3k | 1/2W | Carbon | AA |
| R881 | VRD-RA2BE102J | J | 1.0k | 1/8W | Carbon | AA |
| R882 | VRD-RA2BE391J | J | 390 | 1/8W | Carbon | AA |
| R883 | VRD-RA2BE561J | J | 560 | 1/8W | Carbon | AA |
| R884 | VRD-RA2BE152J | J | 1.5k | 1/8W | Carbon | AA |
| R885 | VRD-RA2BE470J | J | 47 | 1/8W | Carbon | AA |

### MISCELLANEOUS PARTS

| | | | | |
|---|---|---|---|---|
| P851 | QPLGN0561CEZZ | J | Plug, 5-pin (GBN) | AB |
| P852 | QPLGN0461CEZZ | J | Plug, 4-pin (YBN) | AB |
| SC851 | QSOCV0842CEZZ | J | CRT Socket (14SL30) | AH |
| SC851 | QSOCV0933CEZZ | J | CRT Socket (21SL40/70) | AH |

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|

## PWB-C: DUNTK9883WEV0(14SL30)
## PWB-C: DUNTK9883WEV1(21SL40)
## PWB-C: DUNTK9883WEV2(21SL70)
## FRONT AV UNIT

### MISCELLANEOUS PARTS

| | | | | |
|---|---|---|---|---|
| J1001 | QJAKE0108CEZZ | J | Jack, Video in | AC |
| J1002 | QJAKE0183CEZZ | J | Jack, Audio in<br>(14SL30, 21SL40) | AE |
| J1002 | QJAKE0183CEZZ | J | Jack, Audio in (L)<br>(21SL70) | AE |
| J1003 | QJAKE0184CEZZ | J | Jack, Audio in (R)<br>(21SL70) | AE |
| P1001 | QPLGN0461CEZZ | J | Plug, 4-pin (D) (21SL40) | AB |
| P1001 | QPLGN0661CEZZ | J | Plug, 6-pin (D) (21SL70) | AD |
| P1002 | QPLGN0461CEZZ | J | Plug, 4-pin (E)<br>(14SL30, 21SL40) | AB |
| P1002 | QPLGN0661CEZZ | J | Plug, 6-pin (E) (21SL70) | AD |

## MISCELLANEOUS PARTS

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| ⚠ | QACCZ3008PEZZ | R | AC Cord | AN |
| | QCNW-0115GJZZ | X | Connecting Cord (21SL70) | |
| | QCNW-0116GJZZ | X | Connecting Cord (21SL70) | |
| | QCNW-0117GJZZ | X | Connecting Cord (21SL40/70) | |
| | QCNW-0118GJZZ | X | Connecting Cord (21SL40) | |
| | QCNW-0119GJZZ | X | Connecting Cord (14SL30, 21SL40) | |
| | QCNW-0131GJZZ | X | Connecting Cord (14SL30) | |
| | QCNW-1963PEZZ | R | Connecting Cord (21SL70) | AG |
| | QCNW-1964PEZZ | R | Connecting Cord (21SL40/70) | AF |
| | QCNW-2105PEZZ | R | Connecting Cord (14SL30) | AF |
| | QCNW-2106PEZZ | R | Connecting Cord (14SL30) | AE |
| | QCNW-2110PEZZ | R | Connecting Cord (21SL40) | AG |
| SP1 | VSP9050PB108A | J | Speaker (L) (14SL30) | AP |
| SP2 | VSP9050PB108A | J | Speaker (R) (14SL30) | AP |
| SP1 | VSP1206PB406E | R | Speaker (L) (21SL40/70) | AU |
| SP2 | VSP1206PB406E | R | Speaker (R) (21SL40/70) | AU |

## SUPPLIED ACCESORRIES

| | | | |
|---|---|---|---|
| TiNS-6654GJZZ | X | Operation Manual (14SL30) | |
| TiNS-6655GJZZ | X | Operation Manual (21SL40) | |
| TiNS-6656GJZZ | X | Operation Manual (21SL70) | |
| TCAUH0006GJZZ | X | Caution Card (21SL40/70) | |
| TCAUH0010GJZZ | X | Caution Card (14SL30) | |
| TCAUH0102GJZZ | X | Caution Card (21SL40/70) | |
| TCAUS3000GJZZ | X | Caution Card | |
| RRMCG1339CESA | J | Infrared R/C Unit | AT |
| QANTR0018PEZZ | R | Dipole Antenna | AQ |

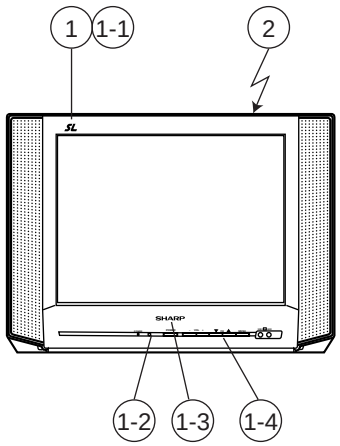
## PACKING PARTS
## *(NOT REPLACEMENT ITEM)*

| | | | |
|---|---|---|---|
| SPAKC0102GJZZ | – | Packing Case (21SL70) | — |
| SPAKC0103GJZZ | – | Packing Case (14SL30) | — |
| SPAKC0109GJZZ | – | Packing Case (21SL40) | — |
| SPAKP0102GJZZ | – | Wrapping Sheet (21SL40/70) | — |
| SPAKP0104GJZZ | – | Wrapping Sheet (14SL30) | — |
| SPAKX0102GJZZ | – | Buffer Material (21SL40/70) | — |
| SPAKX0103GJZZ | – | Buffer Material (14SL30) | — |
| SSAKA0101GJZZ | – | Polyethylene Bag | — |

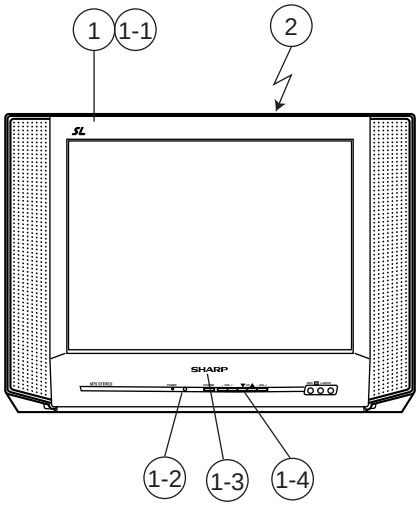
## CABINET PARTS

| Ref. No. | Part No. | ★ | Description | Code |
|---|---|---|---|---|
| | | | **14SL30** | |
| 1 | CCABA0103WEH0 | X | Front Cabinet Ass'y | |
| 1-1 | *Not Available* | – | Front Cabinet | — |
| 1-2 | GCOVA0103GJSA | X | Cover for R/C | |
| 1-3 | HBDGB3121CESB | X | Badge, "SHARP" | AG |
| 1-4 | JBTN-0103GJSA | X | Button | |
| 2 | GCABB0103GJKA | X | Rear Cabinet | |
| | | | **21SL40, 21SL70** | |
| 1 | CCABA0106WEH0 | X | Front Cabinet Ass'y (21SL40) | |
| 1 | CCABA0102WEH0 | X | Front Cabinet Ass'y (21SL70) | |
| 1-1 | *Not Available* | – | Front Cabinet | — |
| 1-2 | GCOVA0102GJSA | X | Cover for R/C | |
| 1-3 | HBDGB3119CESB | X | Badge, "SHARP" | AG |
| 1-4 | JBTN-0102GJSA | X | Button | |
| 2 | GCABB0105GJKA | X | Rear Cabinet (21SL40) | |
| 2 | GCABB0102GJKA | X | Rear Cabinet (21SL70) | |

## CABINET PARTS LOCATION

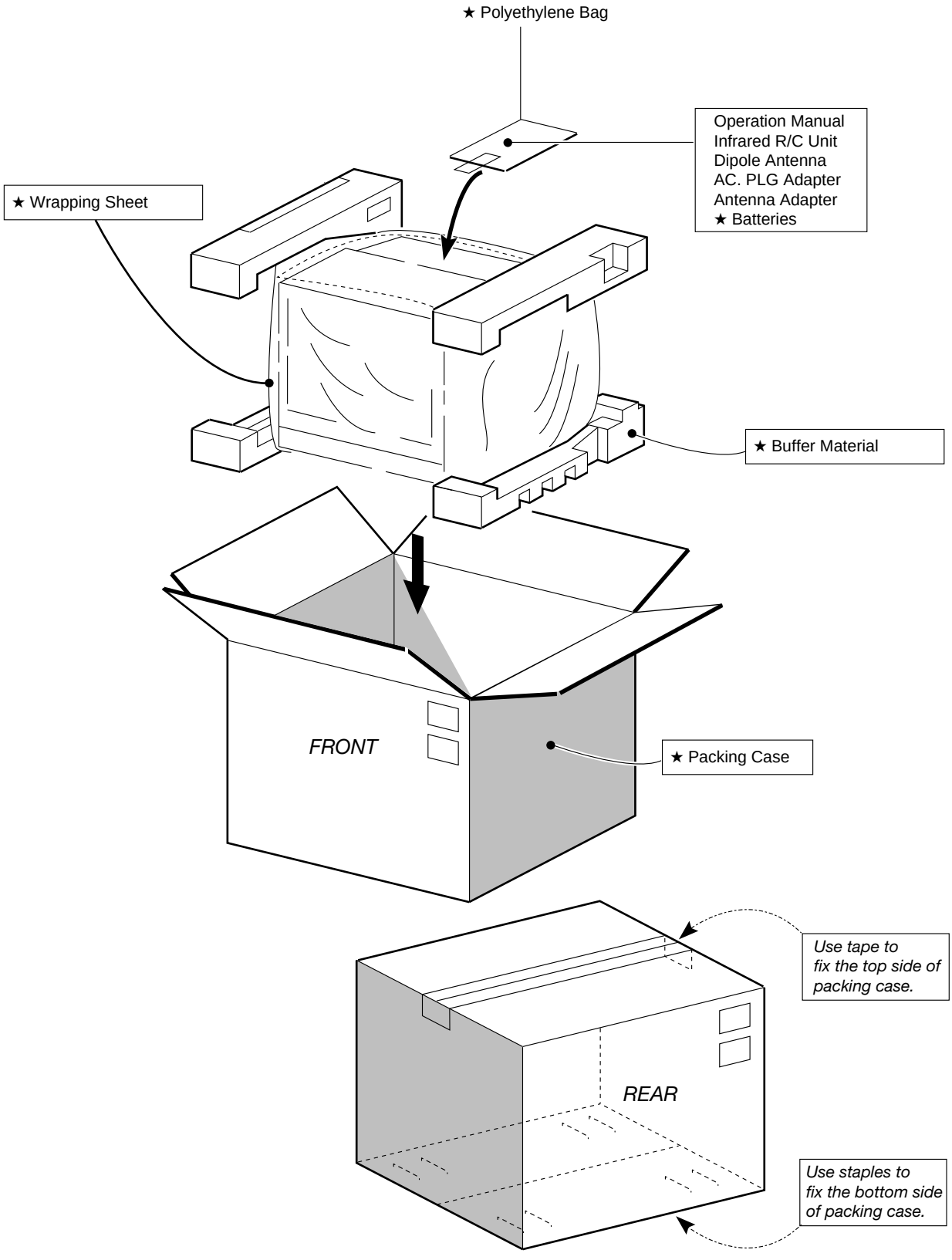



**14SL30**




**21SL40, 21SL70**

# PACKING OF THE SET




★ **MARK** : Not Replacement Items.

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